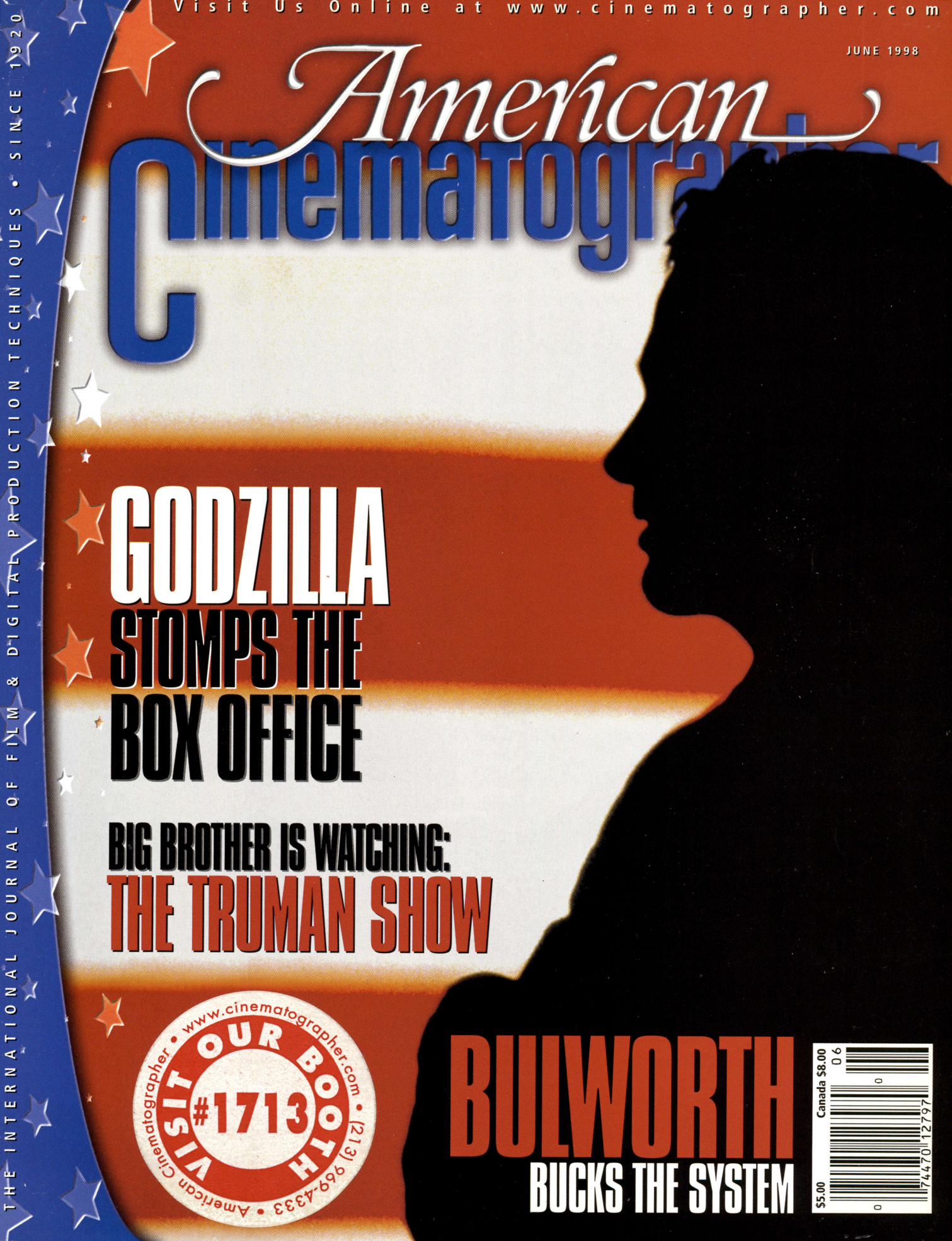
Visit Us Online at www.cinematographer.com

JUNE 1998

American Cinematographer

THE INTERNATIONAL JOURNAL OF FILM & DIGITAL PRODUCTION TECHNIQUES • SINCE 1920



GODZILLA STOMPS THE BOX OFFICE

BIG BROTHER IS WATCHING: THE TRUMAN SHOW

VISIT OUR BOOTH #1713
www.cinematographer.com
American Cinematographer
(213) 969-4333

BULWORTH BUCKS THE SYSTEM

$5.00 Canada $8.00
06
0 74470 12797 0

Introducing the all new DV Steadicam.

Now there's a professional, state-of-the-art Steadicam designed specifically for the new generation of digital video camcorders. On any set, the DV Steadicam is the perfect tool for pre-shot walk-throughs and B-camera support.

To find out more about the new DV Steadicam visit www.steadicam.com, call 1-310-836-7991, fax 310-836-9512 or e-mail dvs@steadicam.com

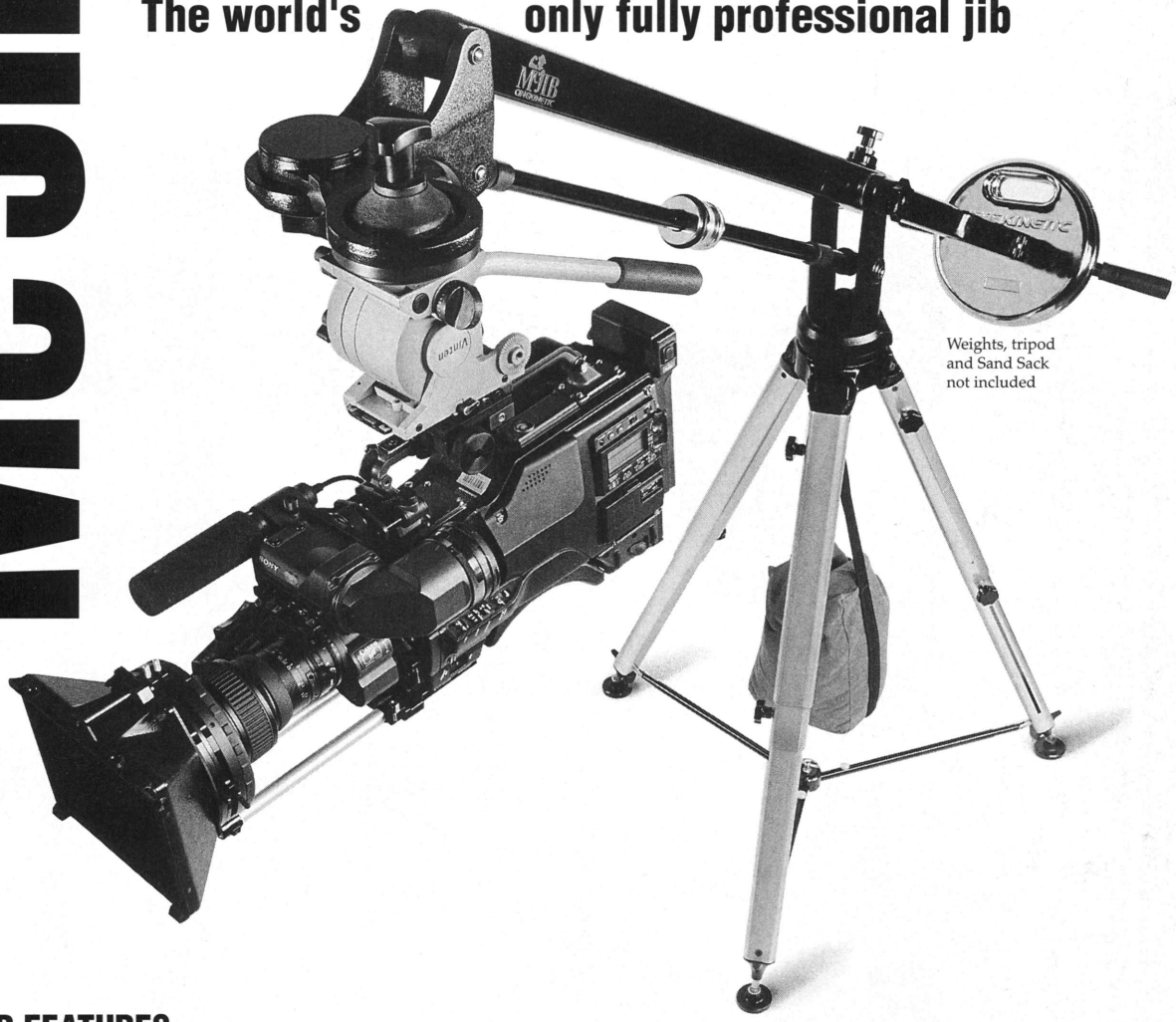
Steadicam® is a registered trademark of Cinema Products Corporation
3211 South La Cienega Blvd.
Los Angeles, CA 90016

Industrial Design by **Sand Lake Design, San Francisco** www.sandlake.com

McJIB

FOR TOTAL CONTROL

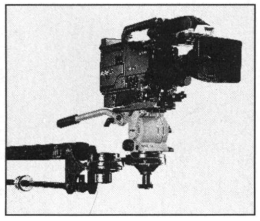
The world's only fully professional jib



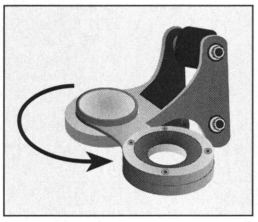
Weights, tripod and Sand Sack not included

ADVANCED FEATURES

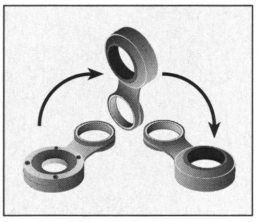
Overslung



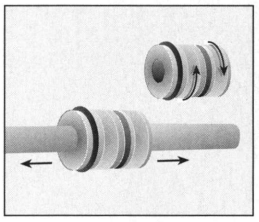
Offset Arm



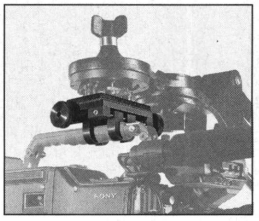
Invertible Bowl



Trim Weight

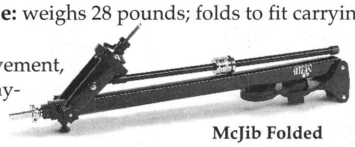


Underslinger



STANDARD FEATURES

- **Five Second Setup:** attaches to most professional tripods with unique built in spider connector; McJib is totally self contained, no parts to get lost.
- **Lightweight and Portable:** weighs 28 pounds; folds to fit carrying case 7"x 41"x 14".
- **Range:** five foot crane movement, 55" radius pan; supports pay-loads up to 100 pounds.
- **Ease of Operation:** High grade bearings insure silky smooth movement; full lock and variable drag is offered through all axis, uses standard barbell weights or Sand Sacks for counter balance.
- **Free Extras:** Keyed handlebars, heat tempered castings, heavy duty tubing, protective cushioning, built in bubble level, two year warranty.
- **Optional extras:** hard and soft carrying cases, 150mm version, Sand Sacks, Underslinger, Cinekinetic's complete range of dollies.



McJib Folded

THE UNDERSLINGER

Converts any conventional fluid head to underslung operation by supporting the camera from its handle rather than the baseplate. Full tilts and pans are as simple as in the standard overslung mode.

Send $10 for our dynamic new video that shows Cinekinetic's complete range of products in action.

CINEKINETIC

Cinekinetic USA Inc
1405 Vegas Valley Dr. #177AJ
P.O. Box 73063
Las Vegas, NV 89170
U.S.A.
Tel/Fax: (702) 731-4700
E-mail: Cinekine@aol.com

Cinekinetic Europe
Greystone House, 279 Bingley Rd.
Shipley, West Yorkshire, BD18 4BJ
England
Tel: +44-1274-533996
Fax: +44-1274-533997
E-mail: CKEUROPE@AOL.COM

Cinekinetic Australia
2 Avon Court
Thornlie, W.A. 6108
Australia
Tel: +61-9-459-3690
Fax: +61-9-493-2168
E-mail: cinekine@ois.com.au

WeaverSteadman

CAMERA SUPPORT SYSTEMS

Weaver/Steadman's new *dsRemote*™ is a digital, servo driven, handwheel operated remote head for film and video cameras. Like the W/S fluid head, *dsRemote*™ is a rigid and compact system. Its modular design and tube frame construction allow flexibility to configure for maximum motion in tight shooting situations. It excels in managing full size camera packages when performing extreme tilts and extreme low angles. It's powerful enough to drive the Arri 435. Both the 2-axis and 3-axis are fast to set-up and balance.

Go

Set-up

Speed | Smooth | Limit | Hand-wheel | Dynamic

Pan | Tilt | Roll | All

− | + | Enter | Cancel

Memory

Record | Home

Replay | Slow Replay

Data I/O | Angle Sweep

To receive a complimentary copy of the *dsRemote*™ *User's Manual* fax your request on letterhead to 310.828.5935

Available at:
Camera Service Center 212.757.0906
Cinemotion 615.297.1732
Dragon's Head Productions 212.645.7500
20th Street Remote Systems 310.264.1091

dsRemote™
is manufactured by
Weaver/Steadman, Inc.
1646 20th Street
Santa Monica CA 90404
310.829.3296
310.828.5935 fax

JUNE 1998 VOL. 79 NO. 6

American Cinematographer
The International Journal of Film & Digital Production Techniques

Features

34 Penny-Wise, Image-Foolish?
Why filmmakers should push for print dailes

40 Storaro and *Bulworth*
An eyewitness account of the maestro at work

52 Master of Light and Motion
Vittorio Storaro responds to *AC*'s questions

58 Monster Mash
Godzilla rises from the deep once again

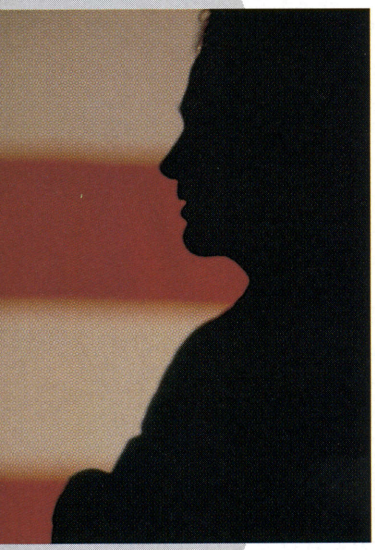
74 This Is Your Life
Television takes a toll in *The Truman Show*

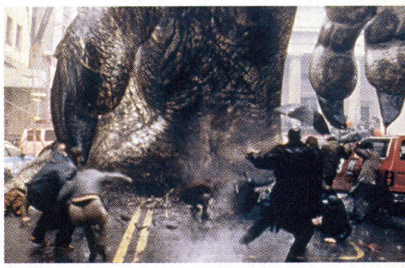
88 True Luminaries
ASC and Academy honor feature cinematographers

108 Dust in the Wind
An arid future awaits in *A Town Has Turned to Dust*

116 A Teutonic Love Triangle
Not a Love Song hits high notes at South by Southwest Fest

124 Better Safe Than Sorry
Local 728 promotes improved industry practices





58

74

108

On Our Cover:
The silhouette of a truth-telling U.S. senator (Warren Beatty) stands out against the American flag in a symbolic still from *Bulworth*, a political satire directed by Beatty and photographed by Vittorio Storaro, ASC, AIC (photo by Sidney Baldwin, courtesy of 20th Century Fox).

Contributing Authors:
Stephanie Argy
Garrett Brown
Richard Crudo
Michael Ellenbogen
Mickey Freeman
Jay Holben
Chris Pizzello
Patricia Thomson

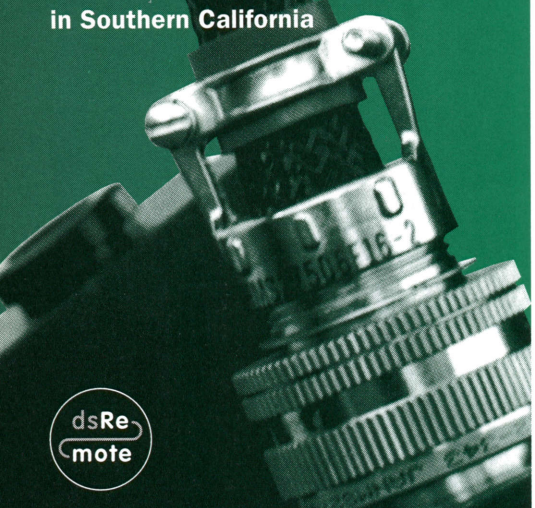
Departments

10 Editor's Note
12 Digital Perspectives
18 Production Slate
133 On the Spot
135 New Products
153 Points East
155 Books in Review
157 Classified Ads
163 Ad Index
164 In Memoriam — Jean Wade Turner
165 In Memoriam — Charles Lang, ASC
166 ASC Members Roster
167 From the Clubhouse
168 Wrap Shot

Visit us online at
www.cinematographer.com

LOCAL
Remote

20th Street Remote Systems
is now renting Weaver/Steadman's
dsRemote™ head
in Southern California



dsRemote

- Complete 2-axis and 3-axis packages
- Preston Fi+Z lens control
- Technical support
- Call for a free *dsRemote™* User's Manual

20th Street Remote Systems, Inc.
1648 20th Street
Santa Monica CA 90404
310.264.1091 tel
310.829.2127 fax

June 1998 Vol. 79, No. 6
The International Journal of Film & Digital Production Techniques • Since 1920

American Cinematographer

Visit us online at
www.cinematographer.com

PUBLISHER Jim McCullaugh

EDITORIAL
EXECUTIVE EDITOR Stephen Pizzello
ASSOCIATE EDITOR David E. Williams
ASSISTANT EDITOR Andrew O. Thompson
HISTORICALS George E. Turner
DIGITAL TECHNOLOGY/VIDEO Frank Beacham
COMMERCIALS Mary Hardesty
POSTPRODUCTION Debra Kaufman
VISUAL EFFECTS Ron Magid
TELEVISION Jean Oppenheimer
TECHNICAL EDITOR Christopher Probst
EAST COAST Eric Rudolph

ART DIRECTION
ART DIRECTOR Martha Winterhalter
DESIGN CONSULTANT Alan Alpanian

ADVERTISING
ADVERTISING SALES DIRECTOR Angie Gollmann
EAST COAST & MIDWEST ADVERTISING SALES Michael Trerotoli
203-761-9804 FAX 203-761-0090
INTERNATIONAL REPRESENTATIVE, EUROPE Alan Lowne
44.1753.650101 FAX 44.1753.650111
CLASSIFIED ADVERTISING Michael Ibanez

CIRCULATION, BOOKS & PRODUCTS
CIRCULATION DIRECTOR Saul Molina
CIRCULATION ASSISTANT Marvin Lopez

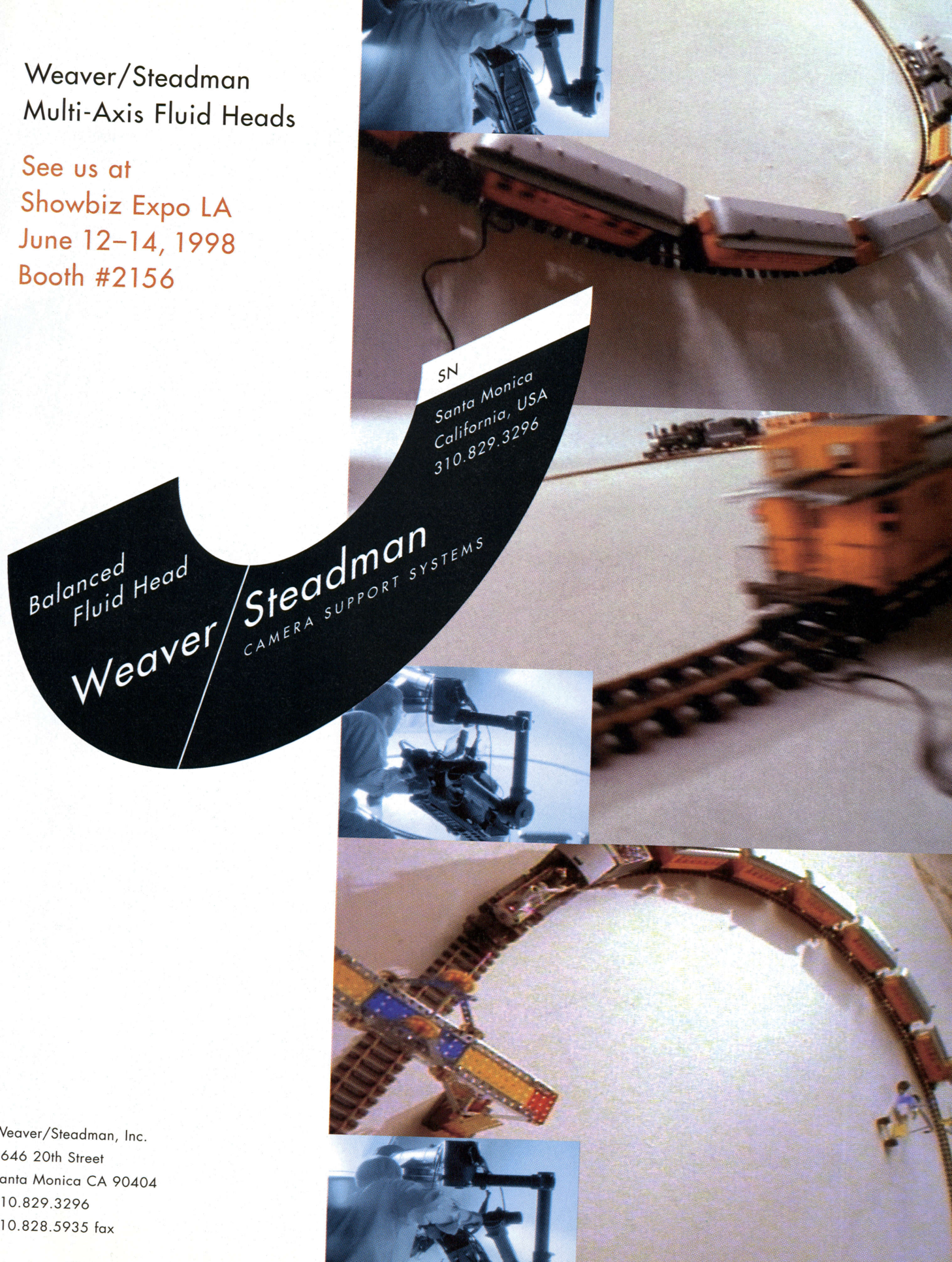
ASC EVENTS COORDINATOR Patricia Armacost
ASC WEBSITE COORDINATOR Jon Stout
jon_stout@cinematographer.org

Publications Advisory Committee
Steven B. Poster, Chairman
James Bagdonas, John Bailey, Russell Carpenter, Curtis Clark, Dean Cundey, Allen Daviau, Roger Deakins, Bert Dunk, Ron Garcia, James Glennon, Robbie Greenberg, John Hora, Johnny Jensen, Mikael Salomon, Sandi Sissel, Robert Stevens, John Toll, Michael Watkins, Kenneth Zunder

American Cinematographer (ISSN 0002-7928) established 1920 in 79th year of publication is published monthly in Hollywood by ASC Holding Corp., 1782 N. Orange Dr., Hollywood, CA 90028, U.S.A., (800) 448-0145, (213) 969-4333, Fax (213) 876-4973, direct line for subscription inquiries (213) 969-4344. **Subscriptions:** U.S. $40; Canada/Mexico $60; all other foreign countries $75 a year (remit international Money Order or other exchange payable in U.S. $). **Advertising:** Rate card upon request from Hollywood office. For **East Coast & Midwest sales (203) 761-9804, FAX (203) 761-0090, 387 Danbury Rd., Wilton, CT 06897.** For **European sales +44.1753.650101, FAX +44.1753.650111, The Garden Suite, Pinewood Studios, Iver, Buckingham, England, SLO ONH.**
Article Reprints: Request for100 or more high-quality article reprints should be made to **Reprint Management Services** at **(717) 560-2001.** Copyright 1998 ASC Holding Corp. (All rights reserved.) Periodicals postage paid at Los Angeles, CA and at additional mailing offices. Printed in the USA.
POSTMASTER: Send address change to *American Cinematographer*, P.O. Box 2230, Hollywood, CA 90078.

Weaver/Steadman
Multi-Axis Fluid Heads

See us at
Showbiz Expo LA
June 12–14, 1998
Booth #2156

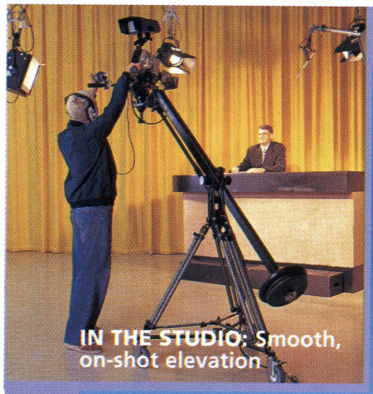


Weaver/Steadman, Inc.
646 20th Street
anta Monica CA 90404
10.829.3296
10.828.5935 fax

215 CALL CAM
(215) 225-5226

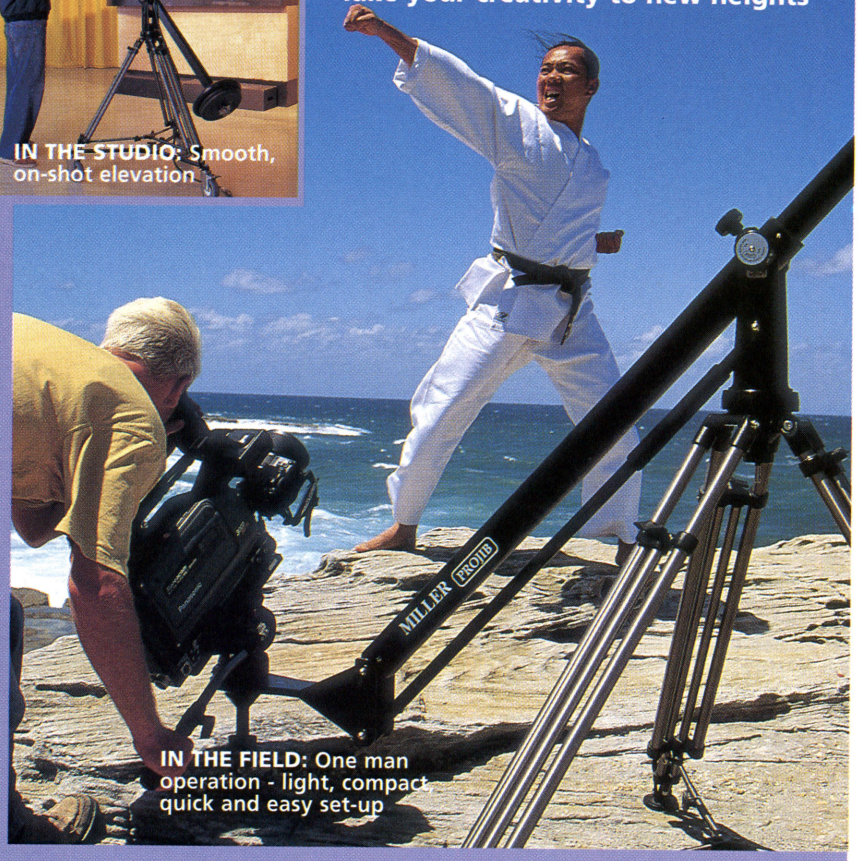
Call for free information on the 200 best Steadicam® operators in the world.

www.steadicam-ops.com
E-Mail: call cam @ AOL.com



MILLER PROJIB

Take your creativity to new heights



- **PORTABLE:** Weighs 25lb, handles 50lb, folds down to 48"
- **PRACTICAL:** Attaches to any 100mm tripod or fluid head
- **VERSATILE:** On-shot in the studio, lightweight in the field
- **MILLER:** Your guarantee of quality, reliability and support

MILLER

Miller Fluid Heads (USA) Inc
Tel: (201) 857 8300, Fax: (201) 857 8188
Web: www.miller.com.au
Email: MFHUSA@aol.com

Miller Tripods Canada
Tel: (604) 685 4654
Fax: (604) 685 5648

American Society of Cinematographers

The ASC is not a labor union or a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as directors of photography and have demonstrated outstanding ability. ASC membership has become one of the highest honors that can be bestowed upon a professional cinematographer — a mark of prestige and excellence.

OFFICERS

Woody Omens
President

Victor J. Kemper
Vice President

Steven B. Poster
Vice President

Laszlo Kovacs
Vice President

Howard A. Anderson, Jr.
Treasurer

John Bailey
Secretary

Gerald Perry Finnerman
Sergeant-at-Arms

MEMBERS OF THE BOARD

Howard A. Anderson, Jr.
John Bailey
Stephen H. Burum
Allen Daviau
George Spiro Dibie
Gerald Perry Finnerman
Victor J. Kemper
Laszlo Kovacs
Woody Omens
Steven B. Poster
Robert Primes
Owen Roizman
John Toll
Haskell Wexler
Vilmos Zsigmond

ALTERNATES

Roger Deakins
Linwood G. Dunn
John C. Hora
Robert F. Liu
Donald M. Morgan

Distinctively

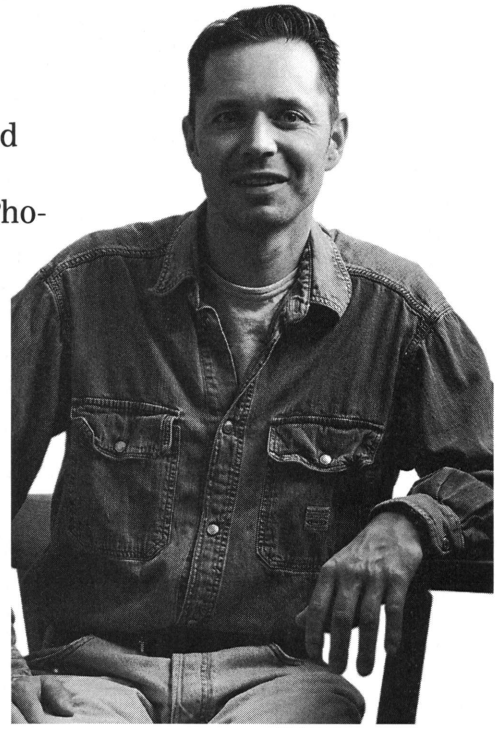
EUROGRIP

Represented in:

Bahrain • Denmark • Dubai • Egypt • England • France • Germany • Holland • Hong Kong • Iraq • Israel • Japan • Jordan • Lebanon • Malaysia • Norway • Oman • Palestine • Philippines • Quatar • Saudi Arabia • Singapore • South Korea • Spain • Sweden • Syria • Taiwan • United Arab Emirate • USA

www.eurogripsweden.com

What we've learned at Clairmont about the Zeiss Variable Primes:



D.P. Tobias Schliessler talks about using them:

"After reading the script for *Free Willy 3*, I assumed I would have to compromise on lenses," says Director Of Photography Tobias Schliessler.

Zoom lens really needed for this job

"I had always avoided zoom lenses, but on this job there seemed to be no alternative. Around two-thirds of the picture would be shot at sea, working from a moving barge. The actors would be on moving boats. Even with a manned crane (moving) and a Power Pod (also moving), trying to frame properly with fixed lenses would slow things down far too much."

Variable what?

"The new Variable Primes had just become available. I was skeptical, but I thought I should try them; so I called Clairmont. They lent me a set, together with a set of Superspeeds, so we could shoot A/B comparison tests at the location near Vancouver."

Probable flare problems

"For *Free Willy 3*, I was hoping to shoot a lot of the water footage backlit. Sun reflections off the waves, in frame. Even if the worst hotspots were just *out* of frame, it would be difficult to flag the lens for tracking and crane shots from the moving barge and hand-held on the moving boats. Some of those boats would be brushed aluminum—like big reflector boards with actors riding around on them."

Comparison test

"We made a series of tests: each scene shot with a fixed Superspeed and then immediately with a Variable Prime at the same focal length, from the same position. We did that with every focal length in the Superspeed set and with the equivalent settings on the Variables, at various T stops. Some of the scenes were the aluminum boats on backlit water, with the sun's reflections bouncing into the lenses. In some of those, we even had the sun in frame."

"When we projected the footage, everyone in the screening theater was amazed to see that the Variables were every bit as sharp as the Superspeeds (which are excellent lenses). We were even more amazed to see that the Variable Primes showed *even less flare* than the Superspeeds."

Flexible framing

"The tests convinced me; and we ended up shooting the whole picture with a set of Variables and a set of Superspeeds. (And a 14mm, which I hardly used.) Sometimes we had one VP lens on the A camera and one of the other two VPs on the B camera. We could fine-tune the framing on both cameras when we lined up the shot—and then we could *keep* it fine-tuned on both cameras by changing focal length slightly as things moved around during the shot."

Perfect matching

"Yes, we *could* have done that with two 5 to 1 zooms; but the VPs were faster, wider and had no flare problems. And their color, contrast and sharpness matched the Superspeeds, which we used for hand-held and 2nd Unit. About a sixth of the picture was shot hand-held; and we intercut that with the VP footage, so the perfect matching was very helpful."

How much did they cost?

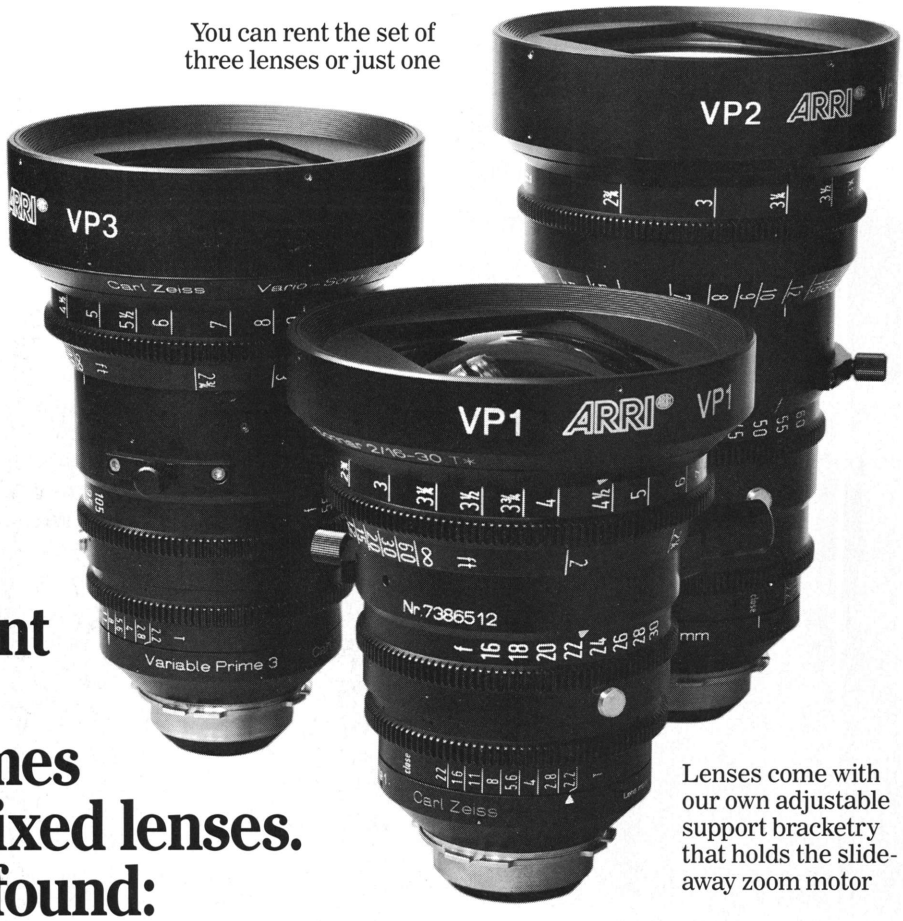
"The VP lenses added about 25% to our lens bill. We rented one set of VPs and one set of Super-

speeds. If we hadn't had the VPs, we would have had to take two sets of Superspeeds *and* a 5 to 1, as insurance."

Focal length fit

"I've been used to thinking in specific focal lengths," says Mr. Schliessler, "So I sometimes picked out a Superspeed to line up a shot, after which we mounted a Variable to film it. And I noticed that the range of each VP seemed a good fit for the fixed lenses it replaced. I never felt the need for a few extra millimeters."

You can rent the set of three lenses or just one



Lenses come with our own adjustable support bracketry that holds the slide-away zoom motor

Denny Clairmont compared a set of Variable Primes with the Zeiss fixed lenses. Here's what he found:

"When the first Variable Primes arrived, ARRI sent me a set to look at," says Denny Clairmont. "I put them through our standard series of projection and MTF measurement tests."

"We have three of the MTF test machines that Zeiss built for ARRI. Every Zeiss lens we buy is tested on a machine like ours before it leaves the factory. It's then inspected at ARRI on an identical machine. When the lens gets to us, we check it out on one of *our* Zeiss machines."

"With the machine, we can confirm that each new lens meets the Zeiss factory-spec minimum MTF numbers. We also write down the actual numbers (at various T stops) for that individual new lens and we keep those numbers on file. Every time that lens comes back from a job, its numbers are read on the machine, to make sure it's as good as new."

"Because they're zooms, I expected lower MTF numbers from the Variable Primes than from the Zeiss fixed focal lengths I compared them with. But I was wrong. Some were slightly lower, some were about the same, some were slightly *higher*! It was quite a surprise. After all, the Zeiss Standards and Superspeeds are superb lenses."

"I also put the Variable Primes on the test projector. (*We have three of those, too.*) There again, I could see that the Variables were as good as or better than the corresponding fixed lenses. Which ones? I compared the VP1 (for example) with the 16, 24 and 32mm Zeiss Standards and with the 18, 25 and 35mm Superspeeds."

"Three of the things zooms have a tougher time with are veiling glare, lateral chromatic aberration and curvilinear distortion. For twenty years, my tests have shown top-quality fixed lenses doing better on those – fixed lenses in the prime focal lengths, that is. So that's what I expected this time. Wrong again."

"The projected images showed that veiling glare (flare) was even better controlled in the Variables than in the fixed lenses, *which are excellent*. Linear distortion was also better than in some of the fixed lenses. And lateral color was the biggest surprise. It shows up clearly in projection, as color fringes; and it's the big difficulty zoom lenses have. But here too, the Variables were as good as or better than the fixed lenses."

CLAIRMONT CAMERA

Hollywood, Toronto, Vancouver

SUNRAY

SHOWBIZ BOOTH
#1442

12/18K HMI
SYSTEMS

FLICKER FREE
OR MAGNETIC

FLICKER
FREE PAR
SYSTEMS

200 S.E.
4-5-7 MAGNUM
575 S.E.
1200 S.E.
2500 S.E.
4000 S.E.
6000 S.E.

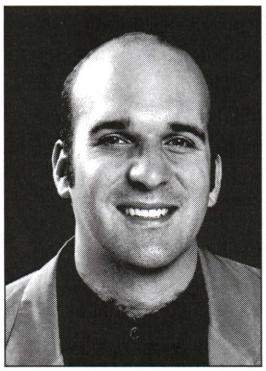
FLICKER FREE
BALLAST
200W thru 18000W

INCANDESCENTS
10/12K
20/24K

SUNRAY MFG.
1-800-SUNRAY-1

Tel: 800-786-7291
WWW.SUNRAY-HMI.COM
sunray@earthlink.net

Editor's Note



Each year at this time, the various studios unveil their summer "event films" with a slowly swelling tidal wave of hype. Potential viewers in our nation's every nook are methodically strafed with full-color print ads, tantalizing television campaigns, towering billboards and publicity stunts of every stripe until they finally submit to the lure of box-office blockbusters (or at the very least, the comfort of air-conditioned multiplexes).

This year's clear frontrunner in the "must-see" megabudget category is *Godzilla* (see page 58), a monster movie so imposing that many other productions simply scampered out of the way when its May 22 release date was announced. Indeed, this epic remake promised a truly gargantuan spectacle — even though most of us in the media were denied even a glimpse of the immense reptile before the picture's premiere (save for the odd shot of the digital dinosaur's overgrown toenails or tail). Hopefully, our art director's loss will be the audience's gain. If associate editor David Williams' account of the production is any indication, the buzz stirred up by the great beast may well be justified.

Standing bravely in the path of this marauding colossus is *Bulworth,* a quirky political satire directed by Warren Beatty and photographed by Vittorio Storaro, ASC, AIC. Our man on the scene was none other than Steadicam inventor Garrett Brown, who has penned a first-person account of his experiences on the show (page 40). We have also included Bob Fisher's Q & A with the illustrious Mr. Storaro (page 52), whose cinematography has already drawn rave reviews.

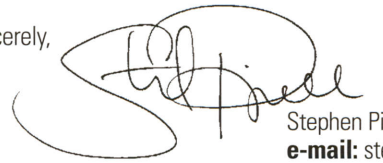
Intelligence is also keenly apparent in *The Truman Show* (page 74), a creative and entertaining allegory which explores a television world that would give even Marshall McLuhan or George Orwell the night sweats. Directed by Peter Weir and shot by Peter Biziou, BSC, this picture offers the hope that as seasonal temperatures rise, viewers won't always have to lower their expectations (or IQs).

For those of you who choose to stay home on those hot summer nights, USA Network's Sci-Fi Channel is offering up *A Town Has Turned to Dust* (page 108), an apocalyptic movie of the week that will surely keep you running to the fridge for liquid refreshments. Adapted from an original script by Rod Serling, this futuristic tale was shot on Digital Beta; cinematographer Mickey Freeman details the finer points of the format in his piece about the production.

This issue of *AC* also offers a look at this year's ASC- and Academy Award-nominated cinematographers (page 88); articles about the advantages of print dailies (page 34) and Local 728's new safety-training program (page 124); and a piece on *Not a Love Song* (page 116), one of the standout films from the recent South by Southwest Film Festival held in Austin, Texas.

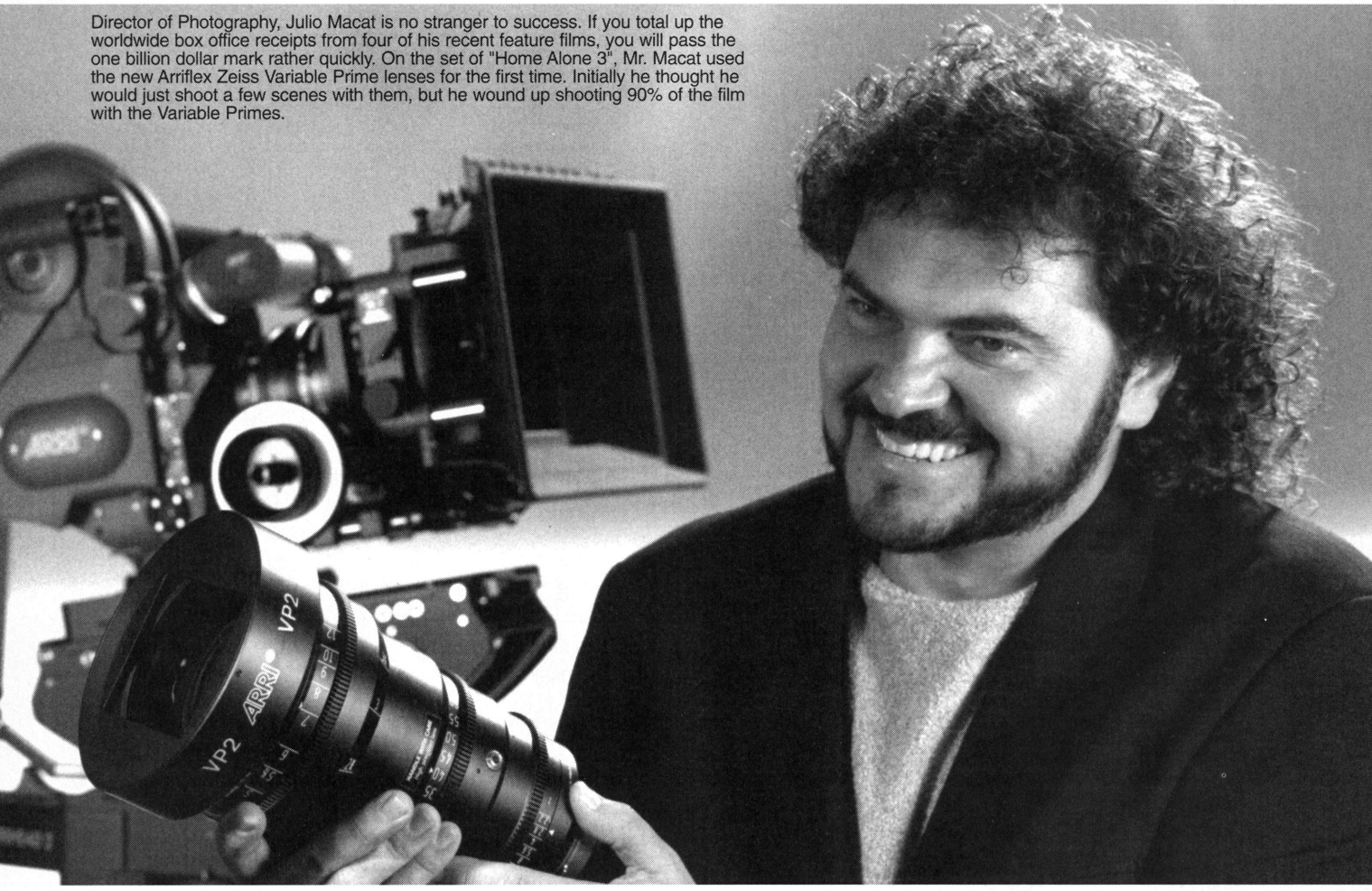
Sadly, this edition of the magazine mourns the passing of two friends of the ASC: longtime member and 18-time Academy Award nominee Charles Lang (page 165), and former *AC* associate editor Jean Turner (page 164). While I never had the pleasure of meeting Mr. Lang, I certainly have fond memories of Jean, the beloved wife of former *AC* editor and current "historicals guru" George Turner. Jean's keen editorial instincts, sassy sense of humor and soft heart endeared her to those fortunate enough to know her, and she will be sorely missed by all of us.

Sincerely,



Stephen Pizzello, Executive Editor
e-mail: stephen_pizzello@cinematographer.com

YOU CAN'T ARGUE WITH SUCCESS.



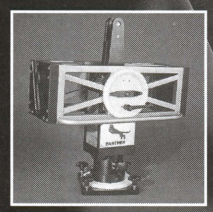
Director of Photography, Julio Macat is no stranger to success. If you total up the worldwide box office receipts from four of his recent feature films, you will pass the one billion dollar mark rather quickly. On the set of "Home Alone 3", Mr. Macat used the new Arriflex Zeiss Variable Prime lenses for the first time. Initially he thought he would just shoot a few scenes with them, but he wound up shooting 90% of the film with the Variable Primes.

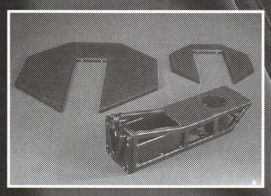
"They're extraordinary lenses. Once they were mounted on the camera, they stayed there, particularly the 29-60mm VP2. Working with the Variable Primes gives you great advantages. When you're on a crane for example and need to adjust the frame slightly to compose the shot, the VPs make this process easy. That speeds up the production without sacrificing image quality. Everyone wants you to work fast. With the Variable Primes you can change the focal length without changing lenses. You have prime lens resolution and light sensitivity with the convenience of a zoom."

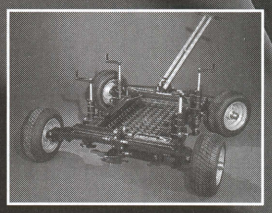
ARRI

ARRIFLEX CORPORATION, Blauvelt, NY • 914-353-1400 • Fax 914-425-1250
Burbank, CA • 818-841-7070 • Fax 818-848-4028
E-mail: Arriflex@arri.com

PEGASUS
CRANE
SYSTEM
ridable platform
max. 32 feet







Just call or visit our website
for more information!

PANTHER®
The Passion of Movement

PANTHER GMBH, Manufacture, Sales and
Rental of Cinematographic Equipment
Headquarter: Grünwalderweg 28c
82041 Oberhaching-Munich, Germany
Tel.: 00 49 (0) 89/61 39 00-01
Fax: 00 49 (0) 89/613 10 00
e-mail: contact@panther-gmbH.de
http://www.panther-gmbh.de

Shotmaker®
DOLLIES & CRANES, INC.
10909 Vanowen Street
North Hollywood, CA91605
Phone 818-623-1700, Fax 818-6231710

Digital Perspectives

A "New Paradigm" for Television

by Frank Beacham

While headlines at the recent National Association of Broadcasters (NAB) convention in Las Vegas focused on the plans of the major networks to experiment with high-definition television, an important side effect of the transition to digital also emerged: the fundamental structure of the television business itself.

Despite much broadcast industry posturing to the contrary, it is still unclear whether over-the-air delivery of network television programming will survive in the digital age. After all, the distribution of broadcast programming through a network of affiliate stations was created a half-century ago because no other means existed to deliver programming to homes throughout America. With the advent of cable and satellite distribution, times have changed. The modern method of broadcasting television signals to the home — through a network of ground-based antennas — may soon end up being no more than "horse-and-buggy" technology.

New distribution methods, with multiple revenue streams, are very much on the radar screen of network executives faced with the mounting costs of financing high-quality television programming. This issue surfaced as a major subtext at NAB '98. Even before the transmission of the first DTV signal, cracks began to appear in the bonds between traditional media allies. "Nothing should be sacrosanct," said ABC president Robert Iger during an address to broadcasters, firing a blow to the long-standing network/affiliate station partnership.

Calling for "a new paradigm for our business," Iger stated that broadcasters must find a way to participate in pay-TV's subscription revenue stream, and proposed a new look at the economics of the network/affiliate relationship. "We need to compare profit margins, and we need to share the risks," said Iger of the networks and their affiliate television stations. "The networks stood tall this year when it came to retaining premier high-cost, high-profile programming franchises, like professional football. We need to ask affiliates to do the same in standing by us."

Iger also proclaimed that "the notion of our programs running only on our networks is an anachronism, and it is now clear that re-purposing expensive product is an imperative." The ABC president then asked, "How long can advertiser-supported networks continue to compete for programming against cable services supported by dual revenue streams?"

In the most basic terms, Iger is suggesting that local stations should start paying their share to the networks for expensive, high-profile national programming, rather than continuing the current policy of the networks compensating stations to carry their shows. Iger's position further maintains that the networks should also be allowed to simultaneously sell those same shows to cable and satellite outlets for additional revenue. Such a scenario could signal the beginning of the end of the current system of broadcast television distribution in the United States.

Another potential blow to broadcasting's status quo came from Senate Commerce Committee chairman John McCain, who informed an NAB audience that he would propose legislation permitting direct-to-home satellite operators to transmit some — but not all — local television stations on their

The Finest Cut.

Avid Film Composer® | Discover every facet.

Avid Film Composer, the award-winning 24 fps digital nonlinear editing system, helps you tell your story with all the brilliance it deserves. It's an intuitive system with seamless links to Avid's effects and audio tools as well as third-party applications, enabling a totally collaborative environment.

Link your script directly into the digital editing process with the unique script-based editing feature. Previsualize effects and graphics to better share your creative vision. Output 8 channels of digital or analog audio all in a single pass. And eliminate guesswork during conform with flawlessly accurate cutlists, ensuring a clear path to the finished film.

Let your story shine with the Avid Film Composer system.

Don't settle.

Call 800 949 AVID

or visit www.avid.com/filmmaking

Avid

tools for storytellers™

© 1998 Avid Technology, Inc. All Rights Reserved. Product specifications subject to change without notice. Avid and Film Composer are registered trademarks and tools for storytellers is a trademark of Avid Technology, Inc. All other trademarks contained herein are the property of their respective owners.

Priority Code: FCFAC498

Avid Film Composer

INDEPENDENCE DAY • ASSASSINS • THE AMERICAN PRESIDENT
THE FUGITIVE • TRUE LIES
THE PHANTOM
TYLER camera systems
NOW AVAILABLE!
TYLER HELICOPTER
CAMERA MOUNTS
WITH GYRO ASSIST
PHONE: (818) 989-4420
FAX: (818) 989-0423
CLEAR AND PRESENT DANGER • BROKEN ARROW

Hand Held With Care

Complete 35mm, 16mm and Super 16 packages. Technical support, time code savvy, creative solutions at an affordable price. Check us out — then check out — at our conveniently located loft in Chelsea. *Mais oui!*

PL mounts on our Arri SR's and Aatons expand compatibility to 35mm lenses including Canon, Cooke, Zeiss, Angénieux, and Swing and Tilts. *Voila!*

Custom B&W and color CCD video taps feature virtually zero light loss and work with all Arri, Moviecam and Aatons. *Touché!*

Supporting cast includes Chrosziel, Sachtler, Weaver Steadman, Cartoni, Norris, Microforce, Media Logic, C.E., Nagra, Denecke – all *coup de foudre* (love at first sight).

Power to spare. Our on-board batteries are Anton/Bauer. Available on Aaton and Arri. *Déjà vu...*

Sales: Marc, Vanina & Jeffrey
Rentals: Shawn, Tony, Bruno & Jeffrey
Call us for a quote or our rental catalog. *Mercí.*

MOVIECAM

Hand Held Films, Inc. 212 691-4898 Fax 212 691-4998
118 West 22nd Street, New York, New York 10011

subscription satellite delivery systems.

He also pointed out that the federal government should not impose must-carry regulations on the satellite operators just as they are poised to offer true price competition with cable. These rules currently require cable operators to deliver all broadcast stations on their systems in a given market. "My view on must-carry is that anything that impedes the ability of satellite carriers to compete is unworkable," McCain said.

If McCain's concept becomes law, major regional stations would find themselves with satellite distribution, while smaller stations would be relegated to second-class status in their markets: another major bruise to the long-term survival of terrestrial broadcasting.

Iger, meanwhile, broke ranks with many of his colleagues by agreeing with the computer industry that the convergence of television and the Internet might soon be an important revenue source for his network — one with more potential than HDTV. "[Such a convergence] offers communication, information and entertainment dimensions that appear limitless, and I believe it will develop into a huge business," he said.

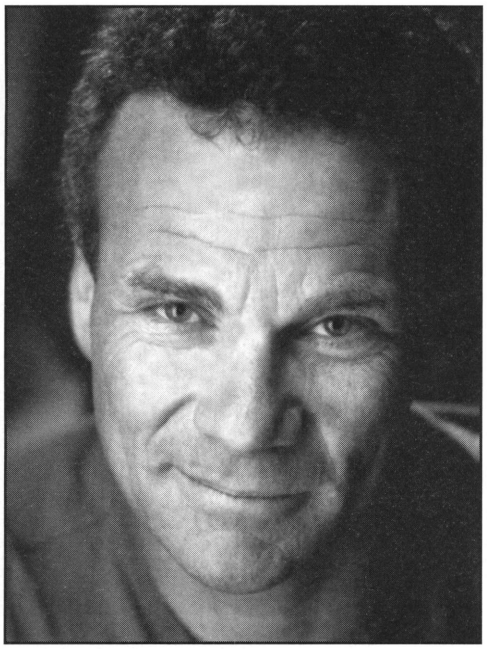
Of course, the relevant footnote to this discussion is that viewers who purchase the expensive new TV sets will initially get a very limited network lineup of prime-time movies and film-based television programs. The remaining program roster will consist of standard-definition fare, albeit with improved picture and sound quality.

Karmazin did concede that geting four CBS stations on the air with a digital signal this year will be difficult. "Within the local markets, we are running into difficulties. Community groups are opposing our tower plans. It's a challenge in every city we are operating in to get the construction done in a timely manner." ■

Frank Beacham is a writer and producer based in New York City. Visit his web site at: http://www.beacham.com. Mail: 163 Amsterdam Ave. #361, New York, NY 10023. E-mail: frank@beacham.com.

"CSC is the best rental house I have worked with anywhere, bar none."

Photo by Murray Close



Mo Flam has worked as a gaffer on numerous feature films including The English Patient, Ghosts of Mississippi, The Firm, Fried Green Tomatoes, and Matewan.

"I have had the chance to work with many different rental houses all over the world, so I've been exposed to a lot of different equipment. Once I find a particular piece of equipment I like I want to use it wherever I go."

"Hardwrick Johnson, Glenn VanderLinden and John VanderLinden, do a great job supporting my work. They have the equipment I want to use, and when that equipment arrives on location I know it is going to work reliably. If I have a problem during the shoot, I know that CSC will resolve it quickly."

"The people at CSC stand behind their jobs and are very attentive to my needs. The emphasis they place on personalized customer service and quality equipment did not exist in New York until CSC started setting a higher standard."

CSC

An ARRI Group Company

For more information or a quotation contact:
Hardwrick Johnson • Charlie Tammaro • George Harris
619 West 54th Street, New York, New York 10019
Telephone 212-757-0906 • Fax 212-713-0075

PRODUCTIONS

USA

ALIEN 4
Prod Co: 20th Century Fox
Dir: Jean Pierre Jeunet
DP: Darius Khondji

ENEMY OF THE STATE
Prod Co: Buena Vista
Dir: Tony Scott
DP: Daniel Mindel

FALLEN
Prod Co: Warner Bros
Dir: Gregory Hoblit
DP: Tom Sigel

MIGHTY JOE YOUNG
Prod Co: Walt Disney Productions
Dir: Ron Underwood
DP: Donald Peterman

PAULIE
Prod Co: Mutual Dream Co / Dreamworks SKG
Dir: John Roberts
DP: Tony Pierce-Roberts

RED CORNER
Prod Co: MGM / Avnet Kerner Productions
Dir: John Avnet
DP: Karl Walter Lindenlaub

RUSH HOUR
Prod Co: New Line Cinema
Dir: Brett Ratner
DP: Adam Greenberg

SWINGERS
Prod Co: Miramax
Dir: Doug Liman
Cine: Doug Liman

VOLCANO
Prod Co: 20th Century Fox
Dir: Mick Jackson
DP: Theo Van De Sande

FRANCE

NETTOYAGE À SEC
Prod Co:Films Alain Sarde
Dir: Anne Fontaine
DP: Caroline Champotier

LE 7ÈME CIEL
Prod Co:Cinea
Dir: Benoit Jacquot
DP: Romain Winding

CEUX QUI M'AIMENT PRENDRONT LE TRAIN
Prod Co: Telema

UK

TRAINSPOTTING
Prod Co: Figment Films
Dir: Danny Boyle
Cine: Brian Tufano BSC

DIVORCING JACK
Prod Co: Scala
Dir: David Caffrey
Cine: James Welland

MY NAME IS JOE
Prod Co: Parallax Pictures
Dir: Ken Loach
Cine: Barry Ackroyd

TANGO LESSON
Prod Co: Adventure Pictures
Dir: Sally Potter
Cine: Robi Muller

A KIND OF HUSH
Prod Co: The First Film Company
Dir: Brian Skirner
Cine: Jacek Petrycki

TITANIC TOWN
Prod Co: Company Pictures
Dir: Roger Mitchell
Cine: John Daly BSC

A LIFE LESS ORDINARY
Prod Co: Figment Films
Dir: Danny Boyle
Cine: Brian Tufano BSC

ELIZABETH 1
Prod Co: Working Title

WORLDWIDE

BRAZIL:

KENOMA
Prod Co: AF Cinema e Video
Dir: Eliane Caffé
DP: Hugo Kovensky

CENTRAL DO BRASIL
Prod Co: Videofilmes
Dir: Walter Salles Jr.
DP: Walter Carvalho

CANADA:

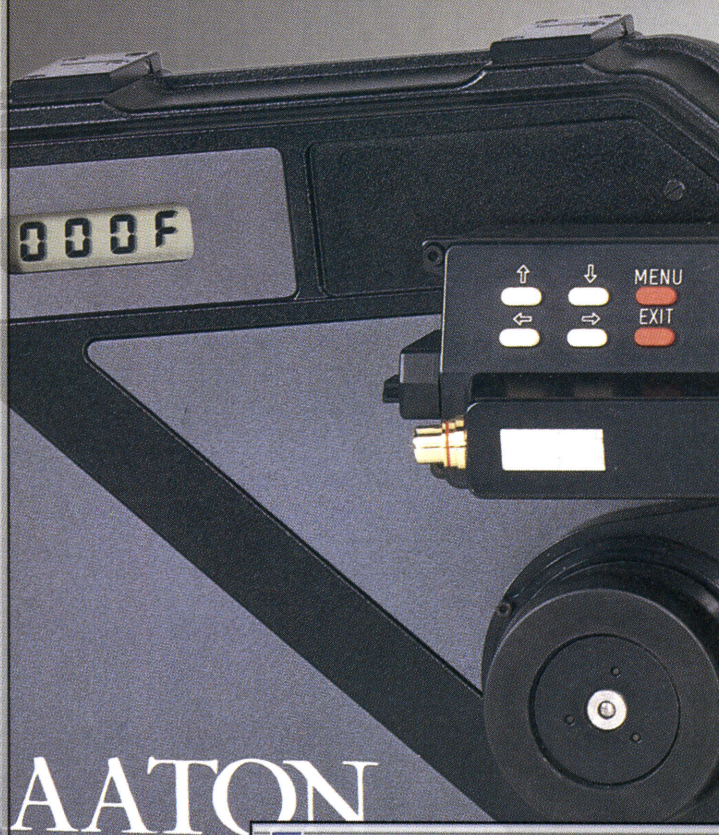
CUBE
Prod Co: Cube Libre / FFP OFDC / Viacom / T'L'Film /
Dir: Vincenzo Natali
DP: Derek Rogers / Scott Smith

HONG KONG:

CHINESE BOX
Prod Co: Wayne Wang

35mm Camera

AATON



Weight 7kg (16lbs) with 400ft load and on-board battery.

Steadiness coplanar adjustable pitch cl movement and lateral pressure plate insu vertical and lateral steadiness to 1/2000 o image dimensions.

Reflex Mirror Shutter user adjustable 180° for 24 fps under 60 Hz lighting; 172.8 for 24 fps under 50 Hz lighting; 150° for 25 fps under 60 Hz lighting & 144° for video monitors at 23.98 fps.

The smallest and lightest

AATON 35

35-III

SALES/SERVICE

USA: Abel Cine Tech
888 223-1599 www.abelcine.com

UK: ICE Film
44 171 278 0908 www.aaton.co.uk

BRAZIL: Haga De
55 11 258-5752 hagade@ibm.net

CANADA: CineAsst
416 975-2565 www.cineasst.com

TECHNICAL SPECS

Magazine instant 400ft preloaded magazine (the only one on any 35mm camera). Reading in feet or meters. Easy loop length adjustment. Magnetic drive.

Power very high efficiency tri-phase brushless motor. Low 1.4 Amp. consumption with film at 25°C under standard 12V power supply (10 to 15V). 20 mags with new 3.0 Ah NiMH, re-cellable on-board battery.

Lens Mount interchangeable hard fronts: PL, Panavision, Nikon.

Viewing System quick release interchangeable screens; 1.37, 1.66, 1.78, 1.85 aspect ratio. Optional eyepiece heater. New Aatonite illuminated markings.

Noise Level 4Perf:33dB, 1m from the lens front. (31dB with soft barney). 3Perf: 30dB, 1m from the lens front.

35/Super35 Operation two minute centering of lens axis for either format.

LCD Display new backlit illuminated display of speed selection, remaining footage, ISO

Color VideoSyncAssist high definition, flicker free. Film camera timecode is inserted in both windows and VITC lines. (B&W video -assist available too)

Frame Rate sync speeds include 24, 25, 29.97, 30 fps, and crystal controlled adjustable speeds in .001 increments through a JOG. Internal phase shift control for TV bar elimination.

Time Recording AatonCode featuring both man readable figures and rugged dot

totally integrated, handheld 35mm camera in the world today

France +33 7642 6409 www.aaton.com AATON

Production Slate

compiled by Andrew O. Thompson

Handing Over a *Chinese Box*

by Andrew O. Thompson

Above: Karaoke hostess Vivian (Gong Li) exudes hauteur in *Chinese Box*. Top, right: In the upscale China Club, British journalist John Spencer (Jeremy Irons) enjoys a brief interlude with his unrequited lover. Center: On the streets of Hong Kong, high-strung hustler Jean (Maggie Cheung) pulls a fast one on a couple of unsuspecting tourists.

An allegorical film set and shot in Hong Kong during that territory's last six months as a British protectorate, *Chinese Box* concerns Englishman John Spencer (Jeremy Irons), a jaded journalist who has been residing in Hong Kong for nearly 20 years. With a mini-video camera, John is chronicling the city's dying days under English rule (dubbing his work "The Pompeii Tapes"), when he happens across Jean (Maggie Cheung), a smooth-talking street hustler with an intriguing past. Stricken with a terminal blood disease, the reporter feverishly acts upon his long-simmering obsession with Vivian (ubiquitous Chinese actress Gong Li), a mainland immigrant who has revamped herself from hard-up hooker to high-class hostess. As Hong Kong counts down to Communist control, all three find that the political permutations are also about to send their personal lives into a spin.

For Asian-American director Wayne Wang (*Eat A Bowl of Tea*, *Dim Sum*, *The Joy Luck Club*, *Smoke*, *Blue in the Face*), last year's historic Hong Kong handover seemed an ideal opportunity to finally return to his birthplace and make a modern-day movie. But the director found that weeks of filming *Chinese Box* in sequence forced him to come to terms with the wounds rendered by his own cross-cultural upbringing. Wang explains, "I grew up as a colonial citizen, and I wasn't aware of how influenced I was by the British — I had put myself in denial of all that. I grew up with British TV, foods and education, but at the same time I grew up with a lot of racism on their part. So when I went back and started filming, I slowly realized that as much as I hate the British, I'm also influenced by them. When that [Union Jack] flag came down [during the June 30th handover ceremony], I felt very moved, because the Hong Kong I grew up with was ultimately gone — [but now] some things will be better and some will be worse."

While scouting Hong Kong, Wang managed to view the recent Emir Kusturica epic *Underground*, (winner of the Cannes Festival 1995 Palme d'Or) which was photographed by Slovenia-based cameraman Vilko Filac, an acquaintance of the Slavic director since their days at Prague's Famu Film School in the early Seventies. Filac's work with Kusturica includes the films *Do You Remember Dolly Bell*, *When Father Was Away on Business* (winner of the 1985 Cannes Palme d'Or) *Time of Gypsies* and *Arizona Dream*. Besides being taken with the cinematographer's shooting, Wang later received a personal recommendation from Johnny Depp (who was being considered for a part in *Chinese Box*) with whom Filac had worked on the actor's directorial debut, *The Brave*. Filac's imagery on *Chinese Box* garnered the Audience

Photos by Cham Kam Tsuen and Peter Mountain, courtesy of Trimark Pictures.

The original Century circa, 1948.

Century .6X Double Asphere Wide Angle Adapter, 1996.

Century 150-600mm Conversion— Academy Technical Achievement Award, 1992.

HALF A CENTURY OLD AND STILL IMAGE CONSCIOUS.

Though we've reached our golden year we haven't lost our edge. Today Century Precision Optics is one of the world's leading makers of professional optics for film and video production. We are proud to be part of a field that consistently pushes the envelope — both creatively & technically. With 50 years of expertise & today's technology, we build the tools to capture your imagery.

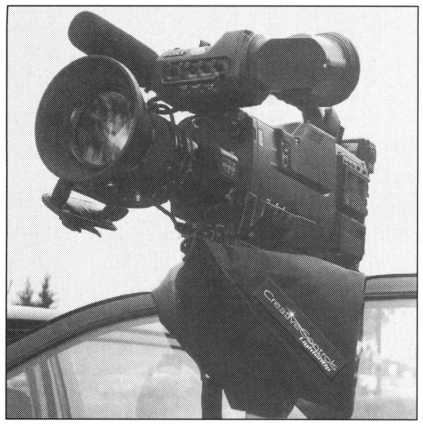
Century Precision Optics today.

50 Year Aniversary Century Precision Optics

Century precision optics
A TINSLEY COMPANY

11049 Magnolia Bl., North Hollywood, CA 91601 • Tel:800-228-1254, 818-766-3715
Fax: 818-505-9865 • www.centuryoptics.com

CreativeControls
LightenUp

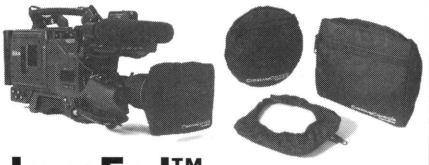


BeanieBag™

Camera support for the shooter who wants to travel light. This high-tech beanbag molds to any surface - shoot any any angles - low, stand-ups, and interviews without a tripod.

BeanieBag™ 7.0 - Black ballistic nylon shell filled with virgin polypropylene, Removable shoulder strap, spill-proof closure., 7 lbs.

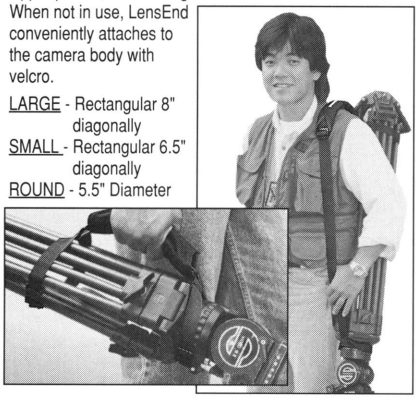
BeanieBag™ 3.5- Black ballistic nylon filled with virgin polypropylene, 3.5 lbs.



LensEnd™

Protect your camera with this good looking lenshood cover that won't fall off or get lost. Elasticized packcloth with front zipper pocket, inside lining can be used for white balance. When not in use, LensEnd conveniently attaches to the camera body with velcro.

LARGE - Rectangular 8" diagonally
SMALL - Rectangular 6.5" diagonally
ROUND - 5.5" Diameter



PicupStix™

The world's only universal handle/shoulder strap for professional tripods. Fastens to the tripod neck and around the legs with a quick-release buckle. Converts easily from handle to shoulder strap.

Constructed of black ballistic nylon and heavy duty webbing with non scratch fittings.

8.5" x 2" x 1.5" (packed) 5 ounces

NALPAK

1937-C Friendship Drive • El Cajon, CA 92020
(619) 258-1200 • Fax: 1-800-4 NALPAK
Web site: http://www.nalpak.com/nalpak

Award at CamerImage 1997 (see *AC* April '98).

In November of 1996, Filac and Wang spent 10 days together canvassing Hong Kong on foot. At this time, the *Chinese Box* screenplay consisted of a 10-page outline. Recalls Wang, "We were writing the script while scouting so we could build everything directly [into the story]. The nature of the piece was such that things might change in Hong Kong [during production], and we were still trying to improve on the script. I felt that the best thing to do was just to shoot from day to day in sequence so that we knew exactly where we were at. We started [filming in] early January until the early part of April, and then we left Hong Kong. We cut the film some more, and went back there [to shoot] during the second half of June until the handover."

One site the duo inscribed into the story was the China Club, an upscale establishment where John and Vivian meet on New Year's Eve and the night of the handover. Its mirrored walls and confining area left Filac with few lighting options; he compensated by utilizing tungsten sources — a pair each of redheads, blondes and babies — fitted with light amber, blue and half-orange filters to lend a warming effect to Kodak's Vision 500T 5279 stock.

Petticoat Lane, the chichi karaoke joint in which Vivian serves as hostess and barkeep, was also adorned with multiple mirrors, while its adjoining rooms were enclosed in glass paneling. "I used no existing lights for those scenes," says Filac. "All around the bar area up top were tungsten neon lights, plus I had around 10,000 watts of other tungsten lights — 800-watt, 1K and 2K [sources]. Lots of lights creates lots of problems, especially for this type of movie — if you want to turn around [with the camera], then you have [to deal with] double or triple shadows. To create minimal problems, you really need to be a minimalist, but in the end we were still be able to produce a good effect."

Initially, the British journalist character was to document the city with a Nikon still camera. But during one of Filac's many walking tours of Hong Kong, he came across a Sony PC-7 mini-digital video camera which he brought to Wang's attention. The two quickly opted for this instrument, since it allowed them to feature the captured footage in true documentary fashion. In total, the cameraman recorded some seven hours' worth of tape as he scoured the city's various districts. Filac submits, "Hong Kong has incredible energy which is both very positive and very negative. It awakened social feelings in me, because I saw the difference between Hong Kong and Kowloon [an adjacent district]. On one side there were Jaguars, Maseratis and Porsches, while on the other side, people were living in courtyards and making soup in front of their homes because they didn't have enough space inside. I found that shocking! It was my first time in Hong Kong, which I always thought to be very developed and very rich — an important economical point in Asia, even though it's very small. I saw that their radical capitalism is sometimes inhuman."

Implementing digital video also allowed the filmmakers to go virtually unnoticed while shooting in sensitive areas such as subway stations, where "if [the authorities] see your camera, they confiscate it," says Wang. "Vilko followed Maggie [Cheung] around with the video camera, but when we needed to film footage to set up the video, we literally crashed in there and got the shots as inconspicuously as possible. Oftentimes, the security guard would literally be 10 feet behind us. We would shoot and then hand the magazine to somebody else, who ran off with it. Shooting in Hong Kong is all about guerrilla style!"

While Wang has spent most of his adult life in the San Francisco Bay area, he typically returns to Hong Kong once a year, frequently enough for him to know the lay of the land and take note of the ever-changing cityscape. Filac's "foreign eye," however, honed in on certain Hong Kong characteristics which the director might not have perceived as being out of the ordinary. "Vilko was very attuned to how the city slowly takes over

Image is everything

When you want the very best Prime Lenses and accessories for your Digi Betacam, DVCPRO or HD Camera...

HD EC PRIME LENSES

40mm

50mm

80mm

150mm

200mm

300mm

x2 Range Extender

Achieve superb control of Depth of Field with this selection of mid-range lenses. Wide Angles and Zooms are also available

Digital camera with OpTex 'state of the art' Deluxe Production Kit

Deluxe Production Kit console

EC ZOOM LENSES

20 x 8 EC

9 x 5.2 EC

Timber Grip

16:9/4:3 Matte Box

Follow Focus Rig

Fluid Zoom

Ultimate B4 Viewfinder

OpTex Extension Viewfinder

LCD Mini Monitor

Director's Viewfinder

Pushing the limits of Digital Cinematography

Simply the best selection of HD EC lenses and Digital Cinematography equipment available for sale or rental in Europe.
We offer a comprehensive pre-production help and advice service to ensure that you have precisely the right kit for your needs.

Improve your digital image, contact the OpTex team on **+44 (0)181 441 2199**, fax **+44 (0)181 449 3646**
e-mail **info@optexint.com** or read more on **www.optexint.com/optex/**

See it, try it, rent it, buy it from OpTex... **FIRST**

OpTex®
Working to improve your image

TS-2(SB)
Time Code Slate

Low Price!

- Fits in a front box
- Internal Time Code Generator
- Replaceable Lexan Face
- Three Position Intensity Switch
- Black & White or Color Sticks

Denecke, Inc.
5417 Cahuenga Blvd., Unit B
North Hollywood, CA 91601
☎ 818.766.3525 🖷 818.766.0269
denecke@pacbell.net

the community life on the street, and in a way we built that into the whole sensibility for Jeremy Irons' character," the director remarks. "He lives in this old-fashioned area with community life — a marketplace, some smaller family-run shops — and it's all slowly being eaten up by big businesses. Vilko's eye is also apparent in the sequences where Ruben Blades [who plays Jim, a photographer and old friend of John's] tries to get one postcard shot of Hong Kong. [Jim finds] this great light that's beautiful but boring, so he then goes into the all of the seedier, darker sides of Hong Kong — places that I normally won't even venture into."

According to Wang, *Chinese Box* was primarily filmed handheld with an Aaton 35-III "because the city itself is so vibrant, jittery and full of energy. In that sense, the best way to capture that world was to do it handheld rather than with a pristine, smooth type of look." He does concede that most of the handheld footage occurs in the first three-quarters of the film to indicate John's illness-induced delirium. Elegant, composed framing was used elsewhere to suggest the reporter's moments of mental lucidity or peace of mind. "The design of the piece is that in the beginning — before John gets sick — it's pretty stately, even on tripods," affirms Wang. "We also stopped moving the camera when he begins to accept his sickness and finally connect with Gong Li's character. We very consciously shot from a tripod — there's a whole series of locked-down shots [during the couple's brief reconciliatory love affair] that dissolve into each other. I wanted the contrast of these very still shots versus the very physical feeling of the handheld ones." To sustain an all-around consistency in the camerawork, Wang enlisted local resident Christopher Doyle, HKSC — who is known for the swiftly-swirling style he lends to director Wong Kar-Wai's work — as second-unit cinematographer.

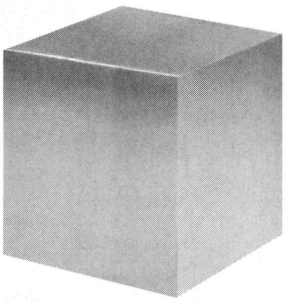
Because Hong Kong is so deluged with both pedestrian and vehicular traffic, authorities have banned the use of motion-picture cameras on city streets to prevent the blockage of any thoroughfares. The filmmakers therefore had to capture all of their exterior footage (shot on Vision 320T 5277 stock) on the fly. Filac remembers, "We didn't have permission to shoot a demonstration scene [in the center of Hong Kong], where hundreds of people are dressed in black and carrying black umbrellas to protest after a man kills himself in the China Club. Chris Doyle and I each had a camera, and it was all about improvisation and provocation. We did that shot once and then disappeared in different directions; five minutes later, about 11 or 12 police cars appeared because we had stopped all the traffic."

However, Wang maintains that interference from the authorities sometimes was the least of the production's problems. "The night market part of Hong Kong is very crowded and controlled by many different triads [gangsters]. If you tried to get help from one triad, the other one would get angry, so we just decided to go in there and do it. It was pretty scary, because anything could happen from second to second. Maggie and Jeremy were really brave — they sat in the van as we set everything up and blocked out the shot, and then at the last second we'd bring them out, do the take and get away. Getting the timing and everything else right can be very difficult when you're doing that type of adrenalized shooting."

The fast-paced, frenzied style of filming was second nature to Filac, who studied documentary directing as well cinematography at Famu. The cameraman found that he could also satisfy his preference for working with small crews, especially during the citywide celebrations. He offers, "I shot on New Year's Eve by myself, just a week after I came to Hong Kong. I even pulled focus alone with an 85mm. Doing it without an assistant was the only way, because it's a mess when you are on the street — people are moving slower and faster. On June 30, we had some extras between the people on the streets, and I also had an assistant, a soundperson, and one or two other [crew] people there. I was on the main street where the celebration was taking place, while Chris was elsewhere." ➢

CLEARLY THE WORLD'S BEST FILTERS

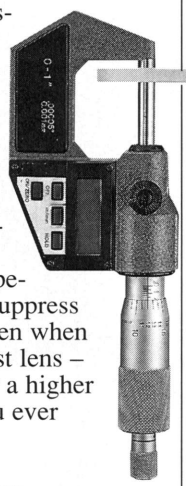
With so much riding on every scene, the filters you use must create the results you need, without causing image defects. With Schneider B+W motion picture filters, you will achieve unprecedented image quality without having to employ extensive laboratory timing correction.



Schneider B+W filters are diamond cut from only the finest crystal-clear, water-white optical glass.

Every Schneider filter is diamond cut from the finest crystal-clear, water-white optical glass, which allows maximum light transmission. Then they are ground and polished to the same high-quality standards that have made Schneider lenses the finest in the world.

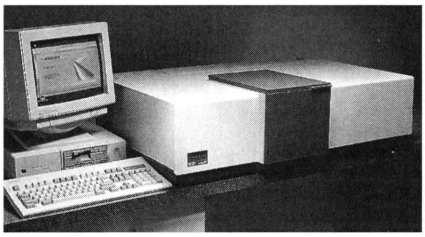
So, whether you're stacking filters or shooting in low light, if you want color saturation, special effects, or need to suppress glare or reflections – even when shooting with the longest lens – Schneider filters deliver a higher level of quality than you ever thought possible.



Guaranteed Consistency

While inconsistent filters wreak havoc on image quality and waste your latitude for photographic error, the absolutely predictable performance and durability of Schneider B+W filters allow you to shoot with total confidence.

We measure each filter's flatness and thickness with an interferometer, and check its exact color performance with a spectrophotometer, so we can guarantee precise continuity from your first to your fiftieth Schneider filter, and beyond. In fact, numerous inspections throughout the manufacturing process ensure that every Schneider filter meets our – and your – most critical demands... always with identical results.

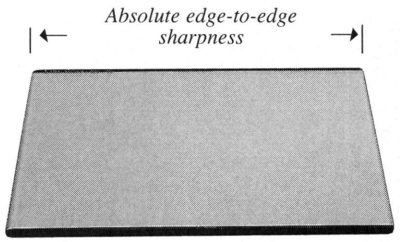


Spectrophotometer examination of every filter guarantees that Schneider B+W filters deliver the same matched performance every time. Superior manufacturing ensures plane-parallelism (the precise flatness and exact parallel relationship between front and back surfaces).

Increased Creative Control

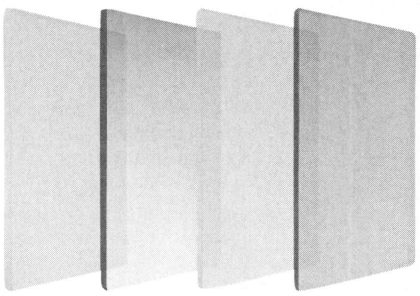
By helping you produce the effect you want in-camera, Schneider filters put more creative control where it belongs – in your hands.

The crystal clarity and precise repeatability of Schneider filters help you get the shot you want the first time and every time, without frustrating "creative surprises." The result is less reliance on post-production correction, more great takes, and more raves at dailies.



Schneider B+W filters employ an exclusive edge sealing technology which ensures long life without delamination, reduces edge reflection, and makes edges virtually chip proof.

Schneider makes a filter to provide the artistic effect you need. Available in square, rectangular and round sizes, in a full line of clear, color correction, color effects, neutral density, warming, combinations,UV absorbing, enhancing, softening, full and split diopters, and the incredible TRUE-POL, which is twelve-times more effective than any other polarizing filter.



A consistently superior light-path provides more corrected light through stacked Schneider B+W filters to insure perfect images, even with the longest lenses.

The outstanding, superior technology of Schneider B+W filters delivers winning results. Since your reputation depends upon perfection, why not give yourself the clear edge.

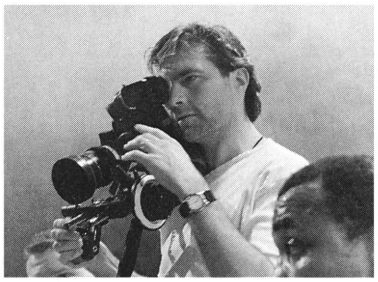
B+W FILTER
Schneider KREUZNACH

Schneider Optics, Inc.
285 Oser Avenue, Hauppauge, NY 11788 USA
TEL: 516 761-5000 • FAX: 516 761-5090
email: info@schneideroptics.com • http://www.schneideroptics.com

The cinematographer did cart along a small package of three or four 800W tungsten redheads to offer supplemental light on exteriors, but he never ended up using them "because when you turn on one light, you immediately have 100 people around you. The Chinese are extremely curious and are not very shy. They'll come within one meter of your eyes and watch what you are doing — it's very funny.

"I was glad to have color temperature problems, because I like to mix the light," Filac continues. "If you shoot in Hong Kong without respecting the existing lights, you're not really making a movie about Hong Kong. The city is really full of colors — red, blue and green neon. I didn't need to do anything [to balance the colors], and I didn't want to.

As both an insider and an outsider to Hong Kong, director Wang holds an interesting take on how the changing-of-the-guard will affect the city's prolific film industry. "What's really depressing is that they don't even have to pass a law or say that you can't show these films; [theater owners] automatically do it themselves," laments Wang. "And the sometimes over-the-top sex and violence [of the indigenous industry] is definitely going to be curtailed. Films are going to look more reined-in."



Above: Judith (Birgitte Raaberg) slowly but surely loses her sanity in *The Kingdom II*. Center column: Danish director of photography Eric Kress, DFF shooting with a Super 16 Aaton XTR-Prod. Right: Stig G. Helmer (Ernst-Hugo Jaregard) surveys the lower depths.

Rechristening *The Kingdom*

by Patricia Thomson

Danish director Lars von Trier may have earned a great deal of international recognition for *Breaking the Waves* (see Production Slate, *AC* Dec. '96), but it was his 1994 television series *The Kingdom* that truly broke new ground. In this bizarre amalgam of hospital soap opera and the occult, von Trier first wed handheld, verité-style cinematography with spiritual subject matter. With the next four episodes now hitting American theaters — under the billing *The Kingdom II* — hindsight makes the similarities between the two projects crystal clear.

The techniques applied on *The Kingdom* series represent an abrupt change from von Trier's previous film, *Zentropa* (1991), a cinematic tour de force set in Germany's post-World War II era of reconstruction. Stylistically self-conscious, *Zentropa* made heavy use of noir lighting effects, rear projection, various film stocks, bravura camera moves and film history references. But when the intellectually precocious director began *The Kingdom* in 1993, he set a challenge for himself that required a different type of virtuosity. Von Trier devised a set of rules, the first being that the entire series would be shot handheld. "He wanted to give himself some limits," recalls 36-year-old director of photography Eric Kress, DFF, speaking by phone from Copenhagen. "Lars wanted a documentary style that would look as if we had walked in the door and started filming right away."

When describing the genre-busting Danish series, American critics invariably come up with catchphrases like "*ER* on acid," but the U.S. police drama *Homicide,* with its extensive use of handheld camera, is a more accurate reference. Though cameraman Kress had done some handheld work on commercials and short features, that method was not his forté. When he joined forces with von Trier, Kress was just two years removed from his studies at the Copenhagen-based National Film School of Denmark. Von Trier had graduated from the same institution a few years earlier, but the pair first met while the director was searching for a young cinematographer for the offbeat series. Kress surmises that "Lars was just looking for someone he could trust."

Mutual confidence was indeed essential, since the duo would be exploring untrod cinematic turf. "This was the first film done entirely with handheld camera, at least in Denmark," explains Kress. "Lars wanted to go further than *Homicide*. He wanted *The Kingdom* to look more gritty and raw, with even more camera movement. The first month of shooting was actually very tough, because we had to readjust [our style] all the time and go further and further."

Kress worked with two lightweight Super 16 cameras — a handheld unit and a Steadicam outfitted with an Aaton XTR-Prod — each equipped with a Cooke zoom. "This is an older zoom — it's like 10.4 to 52mm. Normally for 16mm I would use a Canon 8-64mm lens; in this case, I preferred the Cooke version, because it's much lighter and looks wonderful for television.

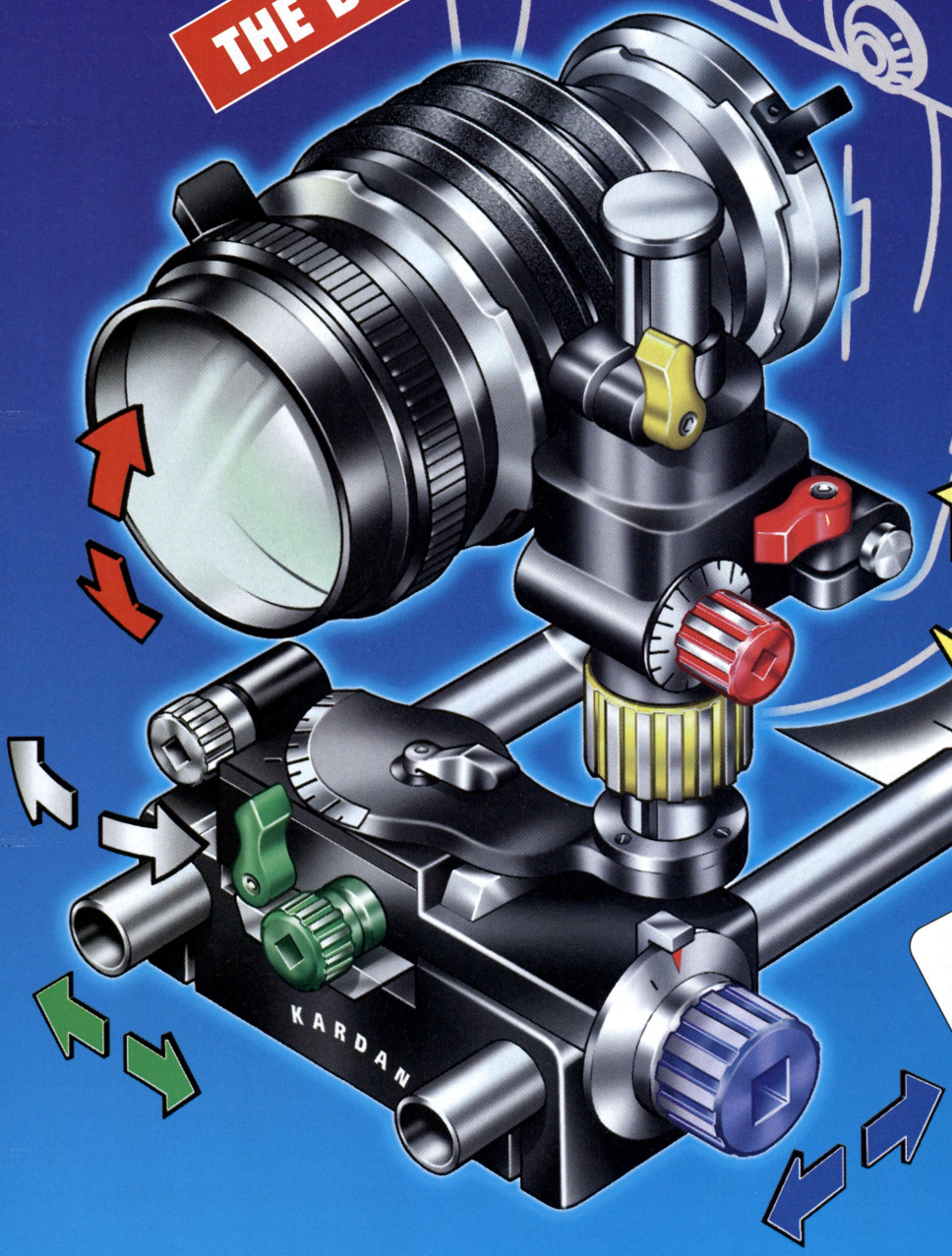
"Sometimes we had scenes with 10 actors and very little room, but I had a wonderful focus-puller, Claus Rosenløb. I would move the camera around — right, left, wide shot, close-up — and at the same time he had to figure out the distance to the person I was filming and then [determine], by eye, the distance to the actors I would potentially be filming next. He didn't know where I would turn the camera. The entire time he had to look over his shoulder — without bumping into me — to see how far away the

Photos courtesy of October Films.

»KARDAN«

SHIFT and TILT-SYSTEM for all 35-16 mm FILM CAMERAS

THE BEST



ShowBiz Los Angeles
June 12-14, Booth # 2162

Interchangeable Lenses

20 mm / T 1 : 2,8
28 mm / T 1 : 2,8
35 mm / T 1 : 2,8
45 mm / T 1 : 2,8
80 mm / T 1 : 2,0
90 mm / T 1 : 2,8
110 mm / T 1 : 2,0
150 mm / T 1 : 2,8

PRÄZISIONS-ENTWICKLUNG DENZ

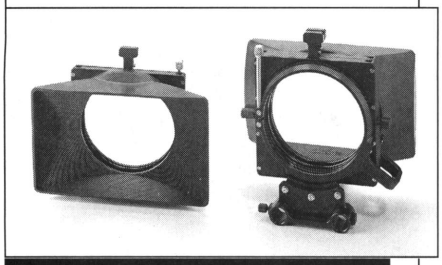
Otto-Hahn-Str. 12 – 14
D-85521 Ottobrunn (Munich)
Phone + 49 89 - 62 98 66 0
Fax + 49 89 - 62 98 66 20

peD denz

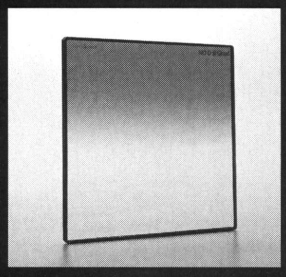
Quality made by DENZ · Quality made by DENZ · Quality made by DENZ · Quality made by DENZ · Quality made by DENZ

Quality made by DENZ · Quality made by DENZ · Quality made by DENZ

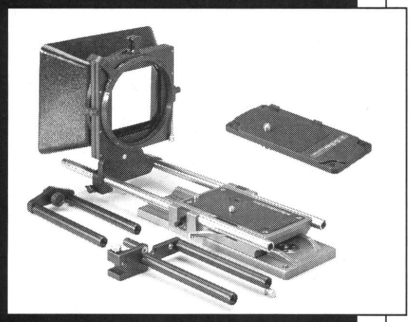
System Van Diemen



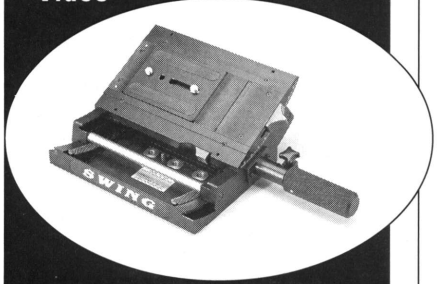
MOSQUITO MATTE BOX
Clamp or Support Mounted, One or Two 4"x 4" Rotating Stages. 3 x3" & 4 x5" Trays



FILTERS:
Distortion-Free Glass or Optical Resin



Convertible Bridge Plates & LW Supports for Film & Video



The Swing Dutch Head

SERIOUS GEAR CO

Tel: 206/285-4776
Fax:206/706-7255
Call for Complete Catalog
Van Diemen UK:
Tel. (44) 1-276-61222
Van Diemen France:
Tel. (33) 1- 34 30 98 82

other guy was. He was doing gymnastics at the same time as the focus pulling — nobody understood how he did it."

Von Trier's second tenet prohibited usage of any additional lighting. Since the show was shot on location in Copenhagen's main hospital and on a set duplicating the medical facility, sources were limited to standard-issue hospital fluorescents (except during night exteriors) so that Kress could shoot in any direction. To compensate for this ban on supplemental illumination while shooting the first installment of *The Kingdom,* Kress utilized Kodak's 500 ASA 7296 tungsten stock (7279 was employed on the second series when 7296 became unavailable in Europe) and pushed the film two stops. Fortunately, the potential shortcomings of pushing the emulsion — increased grain and contrast, skewed color balance and reduced image definition — mattered little to von Trier. In fact, the pair boosted the film's grain and contrast even further by utilizing a silver-retaining, bleach-bypass process. "This gives you a very contrasty and documentary style look," notes Kress. "When you do it on the negative, it works mainly on the highlights; when done on the positive, or the intermediate positive, it works mostly on the darker areas."

In accord with this deliberately raw aesthetic, von Trier sought to make *The Kingdom* full of "errors" endemic to uncontrolled shooting conditions. Shooting without a matte box allowed flared light to seep freely into lenses. Similarly, no one worried about "bad" framing, overly high contrast, or actors walking into dark corners. Recalls Kress, "On *The Kingdom*, we used an Arriflex 16SR-2 and had a lot of hair problems [in the gate] — Lars just loved it. But this time, we had this brand new camera with this hair-free gate, and he was furious that we didn't have any hair. He also got very angry when we showed him that everything was in focus. He said 'Can't you do something out of focus? It's not supposed to look like *this*!'"

The limited lighting tactics tied into a third principle: an impromptu, unrestrained method of acting. "Because [von Trier] wanted to give the actors maximum freedom, we had the rule that the actors were not supposed to know where the camera would be," says Kress, who himself remained unaware of the actors' blocking. "In that way, I could discover the scene with a curiosity [similar to that of a documentarian observing unfolding action]."

With all of its ghosts, zombies, and mutant babies, of course, *The Kingdom* could never be mistaken for a documentary. The series' bizarre, heightened color scheme also steers clear of straight naturalism. A muted sepia-orange dominates most of the hospital scenes (the color of dried blood, in the assessment of one critic) while a ghoulish green characterizes those involving the "evil eye," the center of the demonic forces wreaking hospital havoc. To achieve this off-kilter look, Kress manipulated the show's color tones on the telecine. "[During the transfer process,] we took a lot of colors out, desaturated them, and gave the images a warm brown tone." However, the green scenes — which feature Satan worship and POV shots from a severed head — acquired their peculiar hue and extreme grain from an electronic "night vision" enhancer. Derived from goggles used for military purposes, this device increases exposure by approximately 10 stops; the downside is that the image is rendered in an entirely emerald monochrome. Nevertheless, von Trier found this look advantageous while devising a mood for the hospital's dark forces. Kress details, "It's quite easy to work with, but you have to be careful, because you can take a candle and light a room with a hundred people." That's no exaggeration: the show's devil-workshop scene, for instance, was illuminated purely with candlelight. "But it was not like *Barry Lyndon*," Kress maintains, adding with dry wit, "We had, like, six candles."

Despite the handheld camera, nonexistent lighting, and stump-the-cameraman blocking, Kress' toughest scene occurred in the clear light of day within a single-propeller plane. The script called for the aircraft to be shut

LOSMANDY CAMERA SUPPORT

UNDERSLUNG HEAD $1495.00

The **Losmandy® Underslung Head** may be used at the end of a jib arm or upright on a tripod. Features pan and tilt friction adjustments. This is the first affordable professional underslung head. Easy to set up and balance, it accomodates camera packages up to 45 lbs.

VECTOR® BALANCING SYSTEM $ 160.00

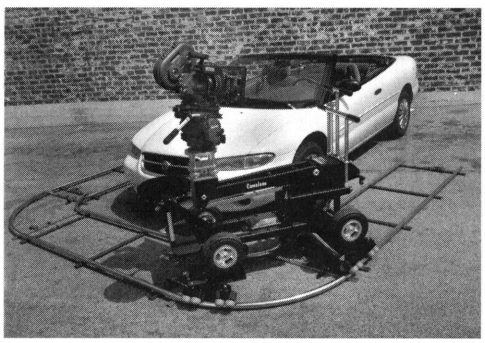
The **Vector® Balancing System** eliminates the inertia from the jib and transforms it into a zero-drift system. The arm stays perfectly balanced regardless of its stopping point. Now the operator can make clean stops. Retrofit kit available.

BAZOOKA $ 895.00

The **Losmandy Bazooka** is adjustable from 24" to 39" in 1-1/2" increments. 6" and 12" Risers available. It will receive a Mitchell, 150mm or 100mm top and support up to 400 lbs. Its base may be bolted to a dolly platform, or the new Losmandy Spider.

SPIDER $ 850.00

The **Losmandy Spider** basic system includes 4 legs each equipped with a leveling post. Equipped with its set of 4 floor wheels or 4 track wheels it will work in any situation. Rather than using a studio dolly, the Spider combined with the Losmandy Bazooka is the easiest and safest way to move around jibs or heavy camera packages. Supports 400 lbs, legs fold for shipping.



PORTA-GLIDE 90® $ 1795.00

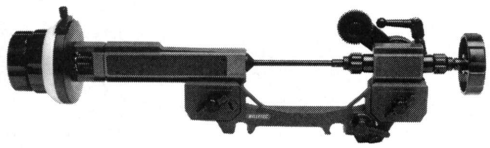
90º and 45º CURVED TRACKS

Fit most standard tracks $ 400.00 per section

Lift up and set any dolly on the **Porta-Glide 90**, and it will ride smoothly on straight tracks, curved tracks and the new 90º or 45º curved tracks.
Losmandy new 90º and 45º Curved Tracks fit most standard tracks.
Four 90º curved for a full 46" diameter circle, eight 45º curved for a full 8' diameter circle.

Willytec Follow-Focus

The Willytec Follow-Focus system is the most complete and professional follow-focus. New accessories will be presented at Show-Biz Expo:one-speed knob, mini rods bridge, mini extension.



New Swing-Tango Head, Sekonic meter, filters, lighting, grip, tripod & fluid heads will also be on display.

Transvideo Monitors

We will present Transvideo full line of video-assist accessories: 5" Rainbow, 6" Cinemonitor, 10.4" and 14" flat monitors, Frameline Generator, Wireless Receivers, De-anamorphizer and Handheld Prompter System.

Blue Modular Handle

This new handle and accessory support system is modular, will fit any camera and can be used for handheld or tripod work. It offers an efficient and professional solution to many accessorization problems.

BIRNS & SAWYER, INC

1026 N. Highland Ave. Hollywood, CA. 90038
(213) 466-8211 Fax: (213) 466-7049
e-mail: info@birnsandsawyer.com
website: www.birnsandsawyer.com

Show-Biz Expo
Los Angeles
June 12-14
Booth 1520

Right: Washed-up waiter Sam (Larry Fessenden) laments his bleak existence in *Habit*. Far right: In full demonic fury, Anna prepares to sink her teeth into Sam. Below: On the streets of New York, Sam is shadowed by his mysterious temptress.

off in mid-air and plummet toward the ground until the hospital's benign spirits save the day. The scene offers a hilarious subtext for those familiar with von Trier's extreme phobia about air travel. But it was no laughing matter for Kress, who was stuffed in the back of the pint-sized aircraft and forced to endure repeated stomach-turning free falls. "After 10 times up and down — [the pilot] would turn off the motor and let the airplane drop — I just couldn't handle it. The co-director, Morten Arnfred, had to do some of the camera-work in the airplane, because I was just too sick — he was very brave."

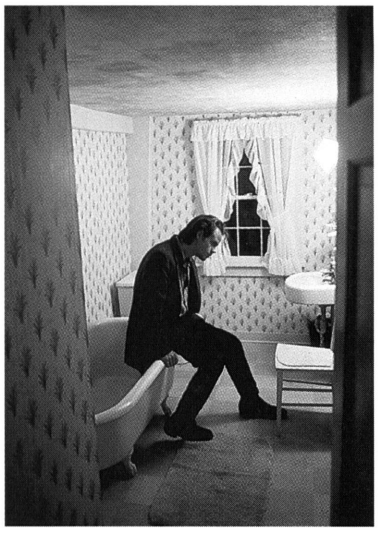
Some of von Trier's other phobias snuck into *The Kingdom*. An unabashed hypochondriac, the director's perspective on the hubris of modern medicine infiltrates the screenplay. But his neuroses got the better of him while filming in the operating room. Kress recalls with a laugh, "He would be 10 floors down and out on the lawn, looking at a monitor — [giving] walkie-talkie direction. And when we did shots on the roof, he would walk 16 flights up — he would not take the elevator. Lars deals with a lot of phobias [while working] on his films, but with a lot of humor — he's not touchy about it."

In 1999, when production ensues on *The Kingdom*'s final installments, the rules established six years ago will continue to hold sway. The cameraman's mission is now to preserve a uniform style for the series over the course of 13 episodes shot years apart. "The challenge is to maintain consistency and to be able to walk into the room and see what is going on in the scene," admits Kress. "I have to take care of the scene's psychology. Every day I have to be there *and* be curious."

Highlighting a Self-Destructive *Habit*

by Michael Ellenbogen

A slow-burning psychological thriller, *Habit* recounts a young man's descent into alcoholism, unsafe sex and, ultimately, suicide. The protagonist is Sam (writer/director/editor Larry



Fessenden), a recently singled waiter who meets up with a nubile, dark-eyed beauty, Anna (Meredith Snaider), at a Halloween party. A smoldering sexuality flares up between the pair, but it seems that after every erotic encounter with this mysterious femme fatale, Sam discovers a new bite or cut in his flesh. In the ensuing weeks, he obsesses over the paranoid delusion that Anna is a vampire, plunging him into an alcohol-induced breakdown.

The film has screened at the Chicago Film Festival, Berlin Market and Los Angeles Independent Film Festival, and earned 1998 Independent Spirit Award nominations in the categories of Best Cinematographer and Best Director.

"*Habit* is an exploration of the

emotions underneath horror — not just the shocks and scares," explains Fessenden. "The foundation of human horror is alienation: being cut off from your fellow man and therefore alone. To underscore that alienation, I wanted to capture the brooding, gothic feel of Manhattan's landscape as it transitions from autumn to winter."

The project's limited budget prompted producer Dayton Taylor to assemble a skeleton crew headed by director of photography Frank DeMarco, whose credits include the Academy Award-winning documentary short *The Johnstown Flood* and *Theremin: An Electronic Odyssey* (see *AC* Jan. '96). The filmmakers often found themselves embroiled in the midst of various street dramas on Manhattan's Lower East Side during the production's stop-and-start shooting schedule — 45 days spread over the course of three months, beginning in September 1994. Recalls DeMarco, "Weaving *Habit's* fiction into the fabric of real New York City streetlife — especially night life — was an incredible experience. We shot during Little Italy's San Gennarro Festival; on Ludlow street as a major heroin bust erupted behind us; and on the sly in the

Photos by Richard Sandler, Whitney Blake and Dayton Taylor, courtesy of Glass Eye Pix.

subways and even in a hospital emergency ward. It reminded me of the work of Italian neorealists like [Roberto] Rossellini.

"Part of the nature and feel of *Habit* is attributable to its coexistence with reality," DeMarco continues. "Because we were so inconspicuous, I could steal shots of our environment. I kept an eye open for, and often captured, those 'happy accidents' when amazing or unusual or insane New York City moments would unexpectedly cross through the plane of our fiction."

Adds Fessenden, "I was surprised and pleased to discover in dailies that Frank had kept the camera running on a pensive actor or a passerby after 'cut' was called. I used these verité moments extensively throughout *Habit* to infuse it with a feeling of reality."

Though the filmmakers found the

The Shape of the Future

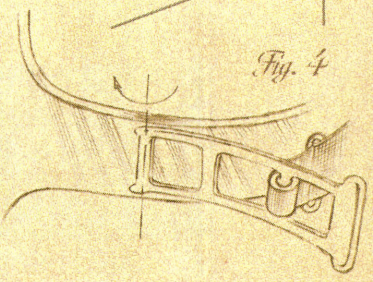


Fig. 4

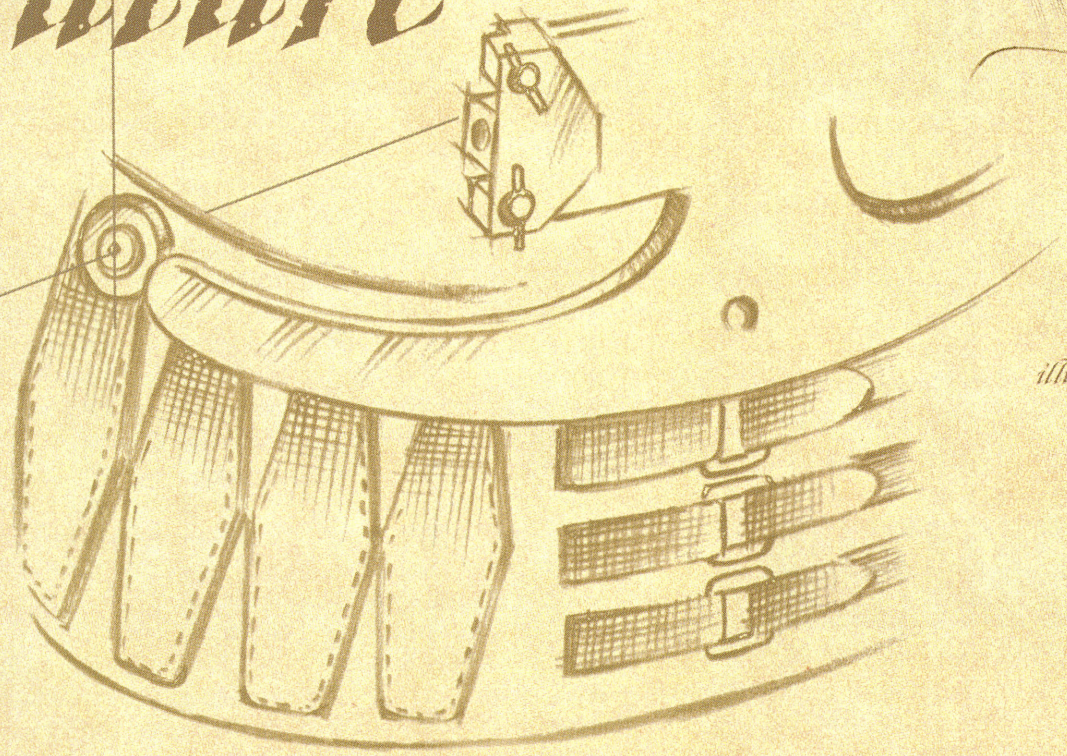


illustration 1

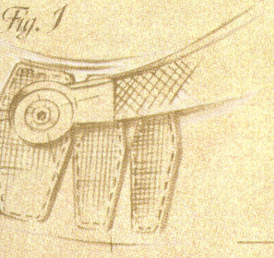


Fig. 1

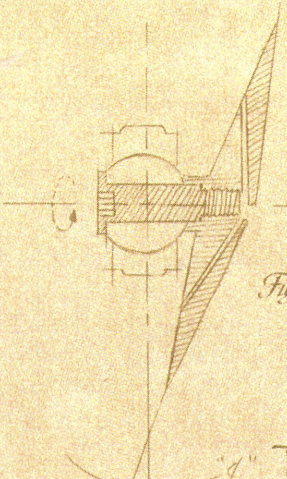
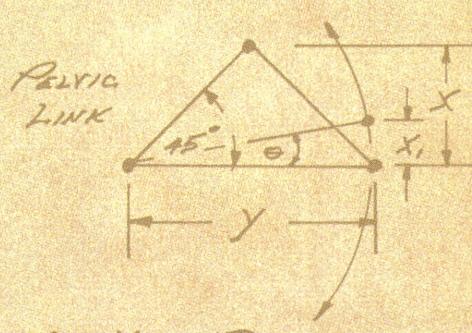


Fig. 2

Fig. 3



$X_1 = Y \cos\theta$

$Y = \text{MEAN} + [2.65\,(50)]$

THE NEW PRO™ VEST

For more information please call: George Paddock, Inc. Tel: (818) 982-3991/(800) 390-3991 Fax: (818) 982-8976

CINEMILLS
COLOR FILTERS
FREE BOOK!
Fast Friendly Service
Huge Selection
Great Quality
* PARGEL PACK
* FULL GEL SHEETS
* HUGE GEL ROLLS
FILTERS
CINEMILLS CORPORATION
20K HALOGEN TUNGSTEN BULLET
20K Halogen Tungsten SILVER BULLET from Cinemills Technology.
* Durable
* Lightweight
* Proven Reliability
Get your new 20K with a lightweight dimmer and a remote control.
WALLYLIGHT KITS
The new 200W and the 575W HMI all-in-one head and electronic ballast. Ideal for interviews, concerts, film locations, video, television, theater and sporting events
Comes with:
4pc lens set
Fresnel lens
Barndoor
Chimera Light-bank & ring
Custom Carrying case
CINEMILLS CORPORATION
3500 WEST MAGNOLIA BOULEVARD, BURBANK, CALIFORNIA
(818)843-4560 Phone FAX (818)843-7834
(800)692-6700 In CA Nationally (800)325-7674
www.cinemills.com

Big Apple's frantic energy amenable to their "horror verité" aesthetic, producer Taylor frequently had his hands full with location logistics. "Larry really wanted to be audacious and break the low-budget conventions of filming a small cast sitting around and talking in a few locations, Taylor says. "He wanted to film chases, visual effects and a freakish nightmare. I'm sure the first thing I told Larry was, 'You know, you're crazy!' My biggest concern was how to do a shoot that had 30 locations, and scenes like a pack of wolves at night in Central Park, a car slammed into a gushing fire hydrant and a nightmare/hallucination on a large boat on the Hudson River."

Visually, *Habit* runs the gamut of cinematic forms — formal, slick, naturalistic, documentary and experimental. It was thus important for Fessenden to work with a cinematographer who could be flexible with his filmmaking. Taylor had his eye on DeMarco even prior to production, due to the cameraman's varied background, which encompasses the realms of features, visual effects commercials, music videos and non-fiction moviemaking.

"Larry and Dayton showed me all of these scouting photos with specific shots, colors and angles," recalls DeMarco. "I was shocked at how these guys had already been working on this thing for months — that's rare for the typical low-budget indie. Larry's scratchy storyboards defined ideas and laid out exact plans for individual scenes, and shots — even lighting!

"Larry and I both strongly believe in the synergy of preparation and spontaneity," he adds. "Larry would carefully consider my suggestions about condensing a scene, or making it more efficient and cinematic, or making it flow into the whole natural progression of what we'd done to that point. Because he had such a strong sense of what he wanted to convey in each scene, he would be confident whenever he decided to deviate from the original plans."

DeMarco's lighting package consisted of Inkies, Kino Flos, PhotoFloods and Chinese lanterns; the film's handful of elaborate night exteriors required the use of HMIs, gennies and full crews. Otherwise, the cinematographer took advantage of naturally-occurring light, simply augmenting or crafting the ambiance to fit the design of the film's vivid color scheme. Much of *Habit's* seething NYC look emerged from Fessenden and DeMarco's deliberate decision to let the color temperatures of practical locations go uncorrected.

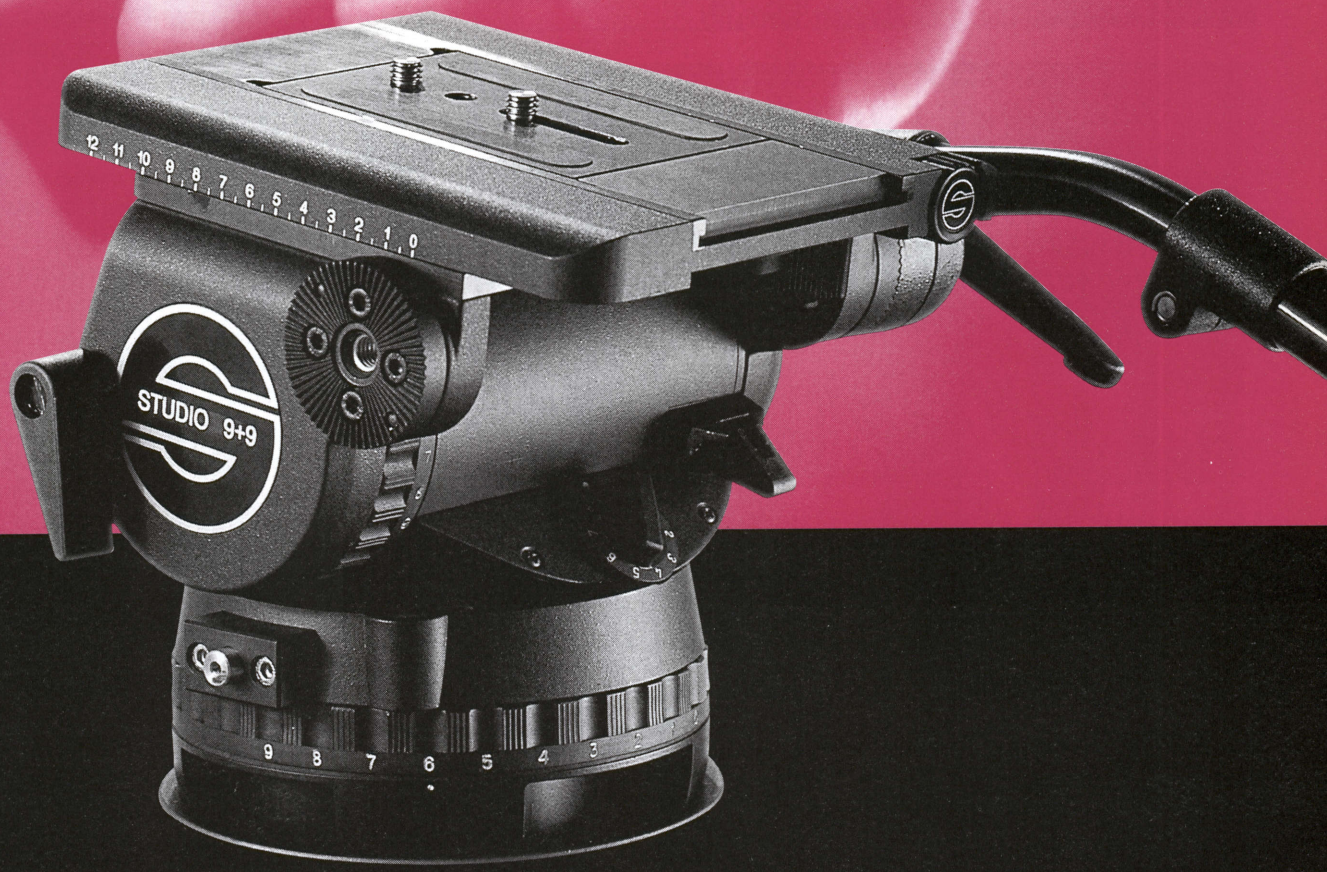
DeMarco photographed *Habit* in 16mm on Kodak's 500 ASA 7298 stock, underrating the emulsion at 250. Fessenden chose the standard 16mm format — as opposed to Super 16 — because he didn't want to limit himself to continually striking a 35mm print. Shooting in the standard smaller-gauge stock in the 1.66:1 projection format made it easier to produce 16mm prints that could be shown at festivals. Offers Taylor, "Because Frank was using sharp Zeiss primes and Kodak film, we knew that the difference between a Super 16 and a 'regular' 16mm blow-up would be negligible. It's a credit to Frank that people think we shot *Habit* on 35mm."

Emphasizes DeMarco, "I had to work hard to give *Habit* a big look. With 35mm you can tell the viewer where to direct his or her attention. That's nearly impossible with 16mm, because it has too much depth of field. I had to shoot wide-open with longer lenses to soften the backgrounds on *Habit's* small, practical sets. My A.C., Jay Silver, did a great job keeping things in focus."

Though *Habit* was put in the can for a mere $60,000, the low budget didn't hinder Fessenden's use of visual effects. "The in-camera effects in [F.W.] Murnau's films and, more recently, [Francis] Coppola's *Dracula* inspired me," said Fessenden. "Dayton and Frank are both inventors with U.S. patents and a fondness for low-tech innovation [see *AC* Sept '96 for coverage of Taylor's innovations in the realm of "virtual camera movement"]. They came up with the flying-perspective pole-cam, the 'thank you Wesclox filter' and 'FrankoStein' lenses. We used time-lapse photography on this show, and we ran the camera backwards. Frank convinced me to shoot one scene at 20 frames per second so

Studio 9+9.

Rocky should have a head like this ...



... and many a punch would be a lot more powerful.

Sachtler has done it again! By giving you the world´s most powerful drag. Nine levels in both pan and tilt provide even more control than you ever thought possible. The light, compact design of the new **Studio 9+9** carries heavy loads with absolute ease, tilting them up to 90°. Or you want to be mobile on 16 mm? Ask your dealer for the **Panorama Plus**.

Sachtler. Even if the going gets tough.

Counterbalance:
137 Nm in 18 steps
Grades of drag:
Horizontally
and vertically 0 to 9
Tilt angle: +90°/-60°
Weight: 8.4 kg (18.5 lbs)
Max. load: 60 kg (132 lbs) at
150 mm (6 ins) cog height
Tripod-/Dolly-fitting:
150 mm (6 ins)
ball or Mitchell base
Camera fitting: Touch & Go
with camera plate 35
Telescopic pan bar
Self-illuminating Touch Bubble

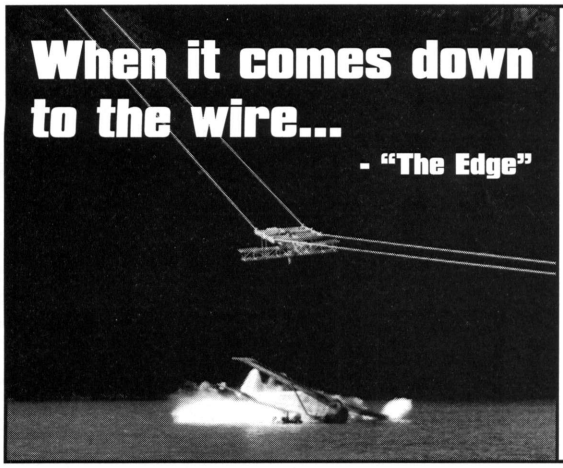
Sachtler GmbH, Germany,
Gutenbergstr. 5, D–85716 Unterschleissheim,
Tel.: +49 (89) 32 15 82 00, Fax: +49 (89) 32 15 82 27

U.S.A.: sachtler® corporation of America,
New York office:
55, North Main Street, Freeport N.Y. 11520,
Phone: (5 16) 8 67-49 00, Fax: (5 16) 6 23-68 44

アミック サハトラー株式会社
Japan Amic Sachtler Corp.
東京都世田谷区三軒茶屋
1－2－21　〒154
電話 (03)3413－1212
Fax: (03)3413-0888

sachtler
Support & Lighting

SK-P



Aerial Rigging Services

Design / Fabrication

Shop Facilities

Rigging Equipment Rentals

Camera Chairs

Thomas Special Effects
Vancouver, B.C. Tel: (604)929-5455
thomasfx@direct.ca

Reach us on the INTERNET at www.glidecam.com

GLIDECAM INDUSTRIES, INC.®

1-800-949-2089
1-508-866-2199
or Fax us at
1-508-866-5133

THE NAME AND FUTURE OF CAMERA STABILIZATION.™

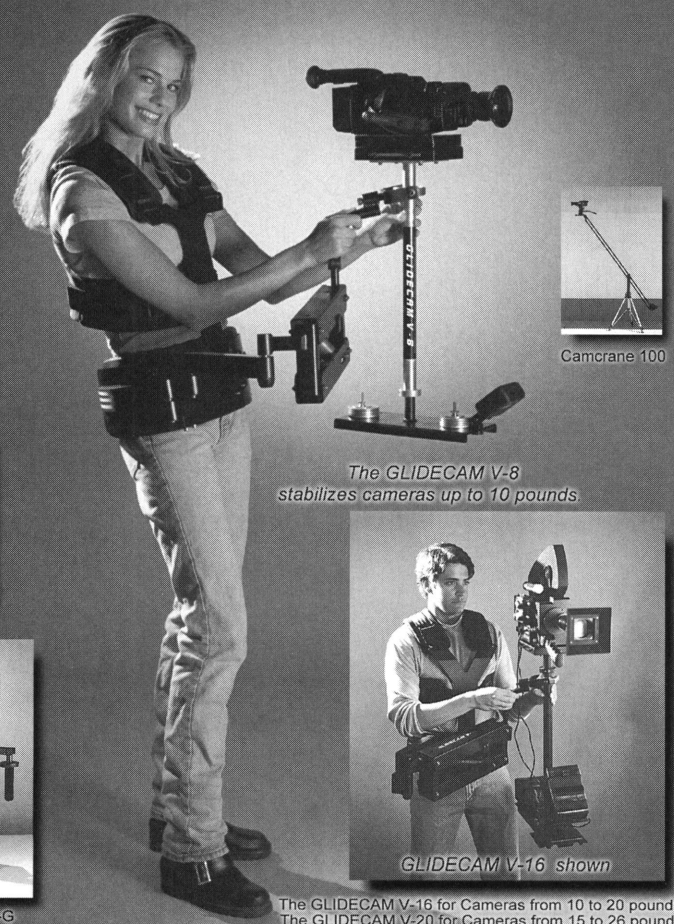
We looked into the soul of the camera operator and saw the GLIDECAM V-8.

Glidecam 1000 Pro

Glidecam Body-Pod

Glidecam 3000 Pro

The Glidecam Dual-G



The GLIDECAM V-8 stabilizes cameras up to 10 pounds.

Camcrane 100

GLIDECAM V-16 shown

The GLIDECAM V-16 for Cameras from 10 to 20 pounds.
The GLIDECAM V-20 for Cameras from 15 to 26 pounds.

With the introduction of the Glidecam V-8, Glidecam Industries, Inc. now offers the most affordable and versatile line of camera stabilizers in the world. With its unique Dyna-Elastic™ Arm and new Orbital™ Hinge technology, the Glidecam V-8 finally brings professional body-mounted stabilization to cameras weighing up to 10 pounds. Combine one of the new lightweight Digital Camcorders with a Glidecam V-8 and you'll have one of the best video acquisition tools available. "Leasing to own" is available. Call us for info on our full line of accessories. Dealers worldwide.

Glidecam is Registered at the Patent and TM office. Copyright 1997 Glidecam Industries, Inc. All Rights Reserved.

the characters would appear to be jumpy and uncomfortable. The sound editing [for that sequence] was hell, but the subliminal effect really works."

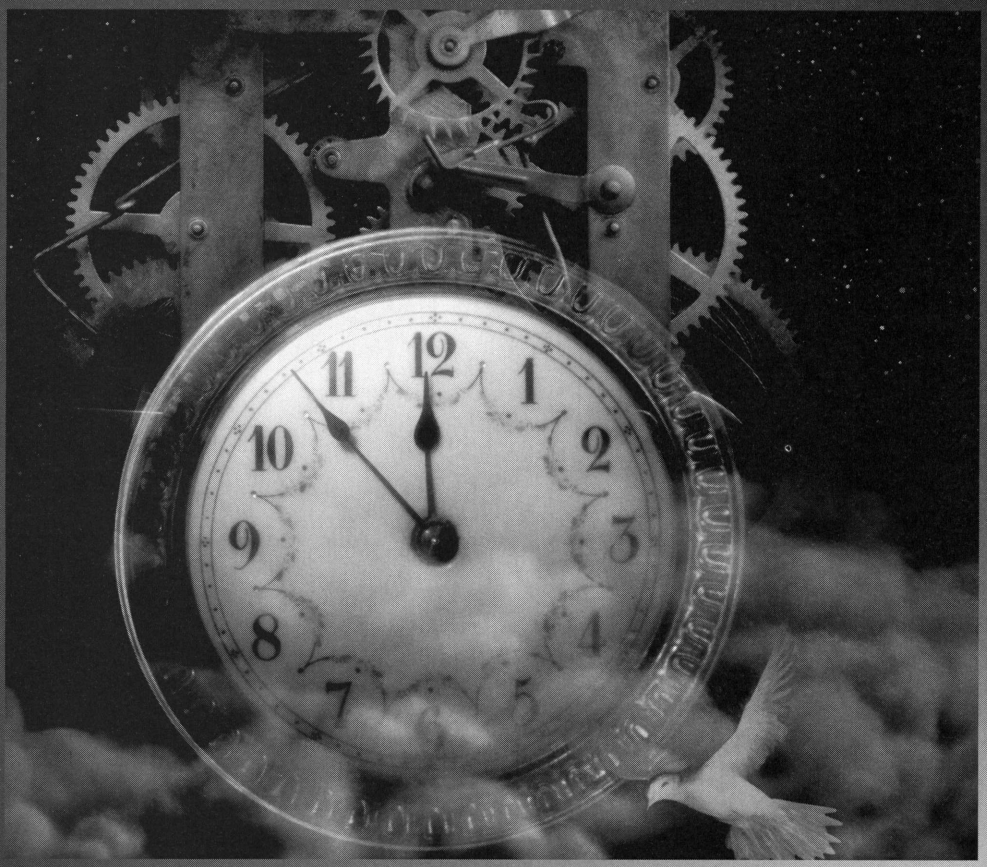
Given the small budget, the film's core six-person crew had to be entrusted with multiple tasks: Taylor produced, assistant-directed and recorded sound; DeMarco operated camera and designed lighting; Jay Silver served as assistant for both camera and lighting; Eric Ogden functioned as grip/electrician; John Arlotto executed art and props; and Stephane Mitchell managed and coordinated the production after casting the film. Fessenden offers, "I've found that the potential for discovery is sometimes lost in the formality of standard filmmaking methods. In spite of the dictates of time and money, filmmaking is, first and foremost, an art form. It thrives on the collaboration and commitment of cast and crew. With *Habit*, I tried to create a fertile environment which encouraged ideas and suggestions from everyone. I wanted them to feel that this was their own project so they were driven to give it their best — you can see and feel it in the finished film."

Manhattan Short Film Festival

On Sunday, September 27, 1998, the first annual Manhattan Short Film Festival (MSFF) will take over historic Mulberry Street with three full-sized screens showcasing 24 short films. Says festival director Nicholas Mason, "Our goal is to discover and promote fresh new talent from selected countries, creating a kind of filmic Olympiad."

The MSFF will award a generous grand prize — a $250,000 feature-film package — to the director of the winning short film entry. The event's sponsors, including Panavision, Deluxe, Fuji and R/Greenberg Associates, have contributed a camera package, 54,000' of 35mm film, processing, prints, editing and opening titles toward this prize. Entry forms can be obtained at the MSFF wesbite (www.msff.com) or by calling (212) 613-5878. Films must be approximately five to seven minutes in length, and the deadline for entry is July 31, 1998. ■

LIGHT YEARS



© Stanley K. Patz 1997

Lowel lasts.
Timeless design since 1959.

Lights, controls, mounts and kits
for imaging professionals.

lowel®

LOCATION IS
EVERYTHING

For a catalog call: **800-334-3426** Fax: 718-921-0303 E-mail: info@lowel.com

Penny-Wise, Image-Foolish?

While video and digital dailies are touted for their economy, they may cost your production more than print dailies in the long run.

by Richard Crudo

Until recently, viewing a previous day's work onscreen in the form of print dailies was the industry standard for theater-bound film projects. Remarkably, throughout the entire history of the movie business, no one had ever flinched at this prospect. No line producers screamed about the cost, no directors complained that they couldn't watch dailies at home, and no editors balked because the cutting process was too slow. It simply was the way things were done. Nowadays, instances in which every circled take on a camera report is printed on film are becoming frighteningly less common — particularly in the low-budget world, but even on some surprisingly high-end shows.

"There seems to be a disrespect on many levels of the industry for what we do as cinematographers, and that's very disturbing, considering our enormous role in the creation of a film," says director of photography Robert Primes, ASC (*My Antonia, Money Talks* and the upcoming *A Murder of Crows*). "The trend toward using video dailies in a feature-film environment is a prominent indicator of that."

Even though certain members of the production hierarchy may be satisfied to review performance or other key elements of a motion picture on tape, for a cinematographer engaged in shooting a feature, not being able to see printed film within a timely basis is the equivalent of flying blind. "By taking away any of the elements brought to a movie by its photography, you lose a tremendous amount of the movie's emotional appeal," Primes continues. "Print dailies are the only way for directors of photography to measure whether they're being too cautious, too reckless or right on the money with their approach to the story."

ASC Vice President Steven Poster concurs. "When I'm shooting a feature, I don't look at tape dailies because they make me second-guess myself. Since video images have no relation to the film image, it can throw my eye."

Some would claim this might reflect a purist or anti-progress attitude, but as anyone long involved in the industry would know, cinematographers have always led the charge into the technological future, and herein lies the weakness for much of the pro-video dailies sentiment. In a world in which directing and producing are continually proving to be entry-level positions, key management and creative slots above the cinematographer are often occupied by people whose knowledge of the job's requirements and experience with implementing them are — to put it kindly — limited. With the debate over film versus tape dailies, this inevitably invites a comparison of two processes which don't have anything in common.

No matter what the format or how good the transfer, the current state of video technology quantifiably discounts precise judgment of every factor regarding lighting, exposure, filtration or scope as it relates to the big screen. In simpler terms, video dailies are useless to the feature cinematographer.

Dan Muscarella is the director of film and video timing at Los Angeles-based Consolidated Film Industries. Having personally supervised the color correction for the film versions of James Cameron's *Titanic* and *Terminator 2: Judgment Day*, he's well-qualified to comment on the matter. "The only way to know what a director of photography is getting both technically and artistically is by printing dailies. It's impossible to discern any of that on video because there's no correlation between the red, green and blue exposure lights you get with film and the R-G-B readings on a vector-scope. There's too much contrast with video, the image is too hard and there's no way to standardize. Video

dailies certainly have their place, but I can't see them working for anyone who cares about what ends up in the theaters."

On the plus side, the new technologies allow for unbelievable speed and versatility in postproduction, but even a cutter who works on the Avid is at a disadvantage without print dailies at hand. Editor C. Timothy O'Meara, ACE (*Music From Another Room, The Grass Harp, Hoosiers*), for one, really loves the digital systems currently in use. "The fact is that you can only see the character within the character — the smaller details in the eyes — onscreen," declares O'Meara. "Things you notice there — impressions, feelings — stay with you later when you go to cut on the monitor and all that is lost. Video dailies are like sitting in front of the TV. With film dailies you're really seeing the movie, and after all, that's what you're supposed to be making, isn't it?"

Editor Kate Sanford (*Outside Providence, American Buffalo, Federal Hill*) highlights another weakness. "Every so often while I'm cutting, it's important to take a look at a conformed print onscreen to check the rhythm of what I'm doing and gauge the feel of everyone's work as a whole. You can't do that with the tiny monitors and lousy resolution we work with."

If that's not enough, the digitizing process essential to computerized editing guarantees that even the most closely supervised video dailies will show a strange, Prozac-like veneer in the photography: all of the highs and lows are obliterated, and there's no real engagement with the emotion of the movie. It's almost like recording a breathtaking symphony only to play it back on a transistor radio. Video dailies also exhibit a more insidious ability to cover up any number of real or potential technical glitches, whether they're related to focus, registration or other factors. Tales of disastrous mishaps are legion and affect not only the cinematographer but everyone involved in the creative chain, from the producer and director on down.

Early in my career I shot a feature during which I didn't see a frame of film onscreen until the answer-print stage. Despite my regular communication with the telecine operator, Super VHS, a beautifully balanced Sony 1910 monitor, innumerable gray cards and the strict attention we paid to exposure and color balance, I still wound up looking at a literal but totally uninspiring video image after wrap every evening. Little did I know that my problems had just begun. Eight months later, while making a check print at the same L.A. facility which processed and transferred the dailies, I found that my negative had been improperly treated at some point in its development. The damage was substantial, irreparable and very noticeable on the prints. Of course, at no time during the five-week shoot did the video dailies show any indication of irregularity. Instead of spotting and immediately correcting the problem by screening print film on the second morning of production, I was forced to spend six weeks — and all the money saved by the producer's decision to use only video dailies — forging an acceptable interpositive. What ultimately went out to festival and theater screens was an inferior product that cheapened the contributions of everyone involved. Plainly, the absence of print dailies ruined the movie, but in a twisted sense the ordeal was a blessing. The dissatisfaction and stress it caused were all I needed to decide that I'd never work that way again.

"Video dailies are like sitting in front of the TV. With film dailies you're really seeing the movie, and after all, that's what you're supposed to be making, isn't it?"
—editor Timothy O'Meara, ACE

One solution that will prevent similar debacles for productions that insist on video dailies is to negotiate for the Print Roll method. It's simple, fast and economical enough for all but the very lowest of low-budget shows, and while not the ideal way to do things, this method at least gives you a fighting chance to protect yourself.

Assume you have four 1000' magazines assigned to your job, labeled A through D. Right off the bat each morning, Mag A is designated to be carrying the Print Roll. As such, it will be held back from recording any of the principal photography and used exclusively to shoot an MOS rehearsal with the actors or a run-through with the stand-ins, once the lighting is set. After this silent, non-official take is completed, Mag A is replaced on the camera by the appropriate Mag B, C or D, which is then used to film the actual scene. With Mag A — the Print Roll — established as the only roll to be printed, Mags B, C and D are now essentially the video roll mags since they're destined for video transfer only. The process is not at all cumbersome, and since you shoot your Print Roll without sound, it can be handled very quickly, provided the time is taken for rehearsal. Besides severely restricting the amount of footage actually printed, projected footage can be seen on an as-needed basis, whether it be a wide master alone, a single close-up or a short burst of every shot of the day.

A related practice dictates the transfer of everything to tape and then the selection of specific takes for printing after the fact. On the

Penny-Wise, Image-Foolish?

printing after the fact. On the surface, this may seem an ideal compromise, but in practice it's a recipe for disaster. Due to the lab's requirements for breaking down exposed film before printing, this method subjects the negative to excessive handling that increases the risk of damage. It's also the cause of numerous logistical problems that can result in lost or misplaced footage. I tried it once for a few days and wouldn't recommend it under any circumstance. The Print Roll method avoids these pitfalls because, in essence, it creates an inert roll. Since there's no accompanying sound and the print roll is never transferred to tape, the lab treats it as it would any other piece of negative meant for printing only. After screening the Print Roll takes to satisfaction, the Print Roll itself is kept in storage for later reference during answer-printing.

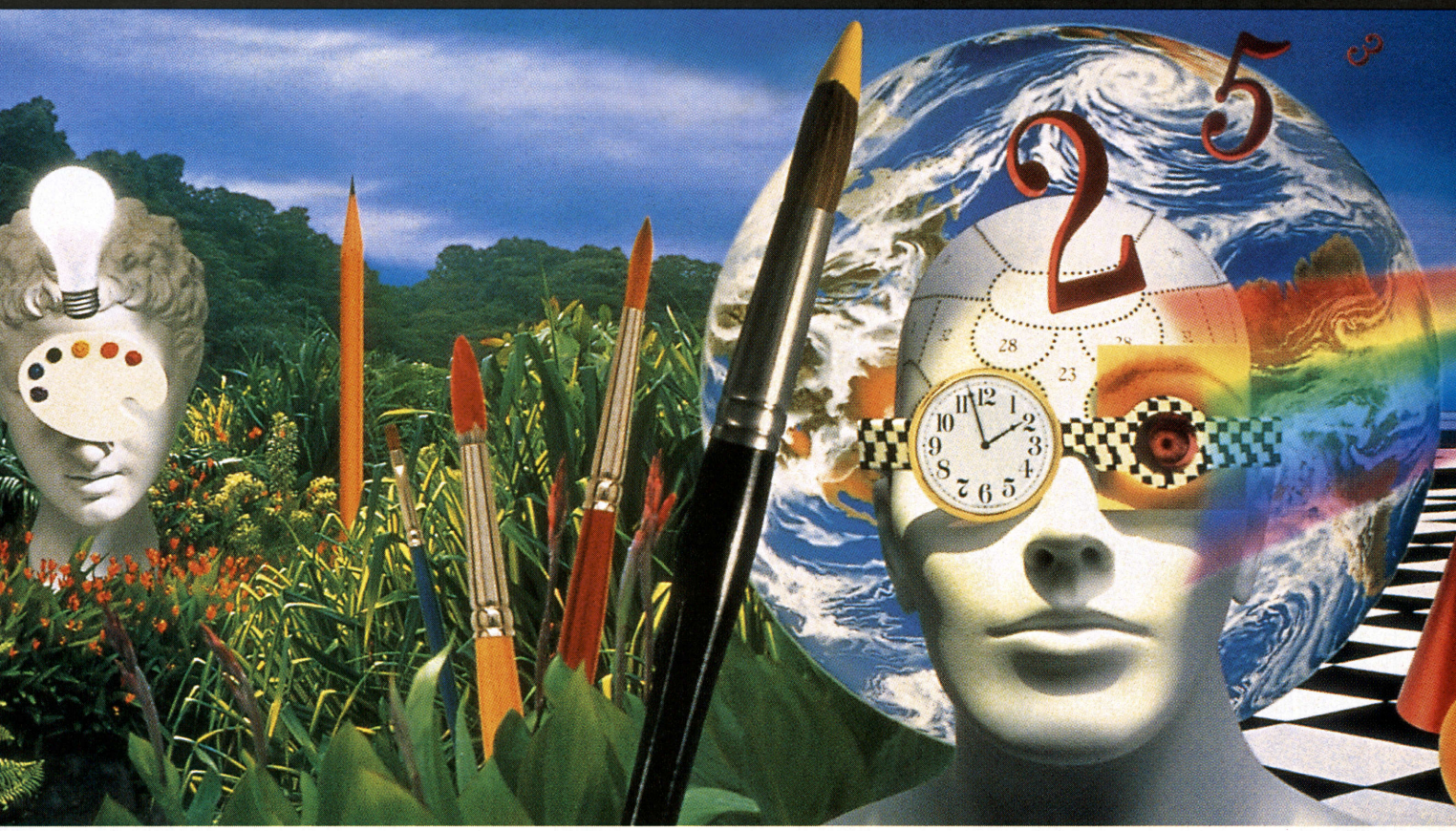
All of these arguments in support of film dailies for feature films stress the importance of maintaining the technical and aesthetic integrity of the image, which is not much to ask when one is hired to work in a visual medium. Despite a director of photography's most reasoned defense, resistance to print dailies sometimes stems from a desire to place their cost in the post-production budget rather than with the up-front numbers. That's unfortunate, because the notion of film dailies as being prohibitively expensive is completely false. "It's not just about money," states Allen Daviau, ASC. "Video dailies without print dailies is an attempt to take control away from the cinematographer."

In the interest of maintaining that control, a number of industry experts were recently canvassed to determine the cost of going with film dailies alone, video dailies alone or any combination of the two. Since the form of dailies you use is closely tied to the system with which you cut, I have also included editing considerations for the sake of an honest assessment. The results are surprising. In ascending order, from the least expensive to the most expensive: **A)Film dailies\film edit.** No video dailies; **B) Videotape dailies\digital edit with no conformed print.** No film dailies; video dailies are transferred from the camera negative. The first film projected onscreen would be the first answer print; **C) Film and video dailies\digital edit.** One-quarter-inch production sound is transferred to 35mm mag track and synched to the workprint. Synched picture and sound are then transferred to create video dailies and to allow for digitization; **D) Videotape dailies\digital edit with conformed print.** No film dailies. Before negative cutting, prints of each take must be ordered so as to conform to one's digital edit list. This can be very expensive and time-consuming and creates all sorts of nightmares for the lab and editor; it also endangers the physical integrity of the negative due to excessive handling.

If you've followed my reasoning to this point, Option C appears to be the choice most likely to keep

Print vs. Video Dailes Cost Comparison *(based on assumptions related in this article)*		**Budget for Print Dailies** [24-day shoot]	**Budget for Video Dailies** [24-day shoot]
• Raw Stock	Kodak 5293 stock [1,200,000 total]	**$62,400**	**$62,400**
•Film Developing and Printing		**$29,592**	**$18,900**
film & video	develop 90% of film used		
print dailies	print 70% (circle takes)		
video dailies	print 25% (selected rolls)		
•Sound Transfers		**$8,640**	**$0**
film	¼" tape to 35mm mag		
• Film Editing Room		**$4,080**	**$0**
film	room and KEM rental supplies/add'l equipment		
• Non-Linear Editing		**$7,200**	**$7,200**
film & video	Avid and room		
• Labor (not including editor)		**$7,680**	**$3,840**
film	projectionist		
film	ass't editor - film & video		
video	ass't editor - video only		
• Videotape Dailies		**$6,984**	**$22,464**
film	synched dailies to tape (approx $85/hour)		
video	neg & sound to tape (approx $225/hour)		
film & video	(2) ½" VHS tapes		
film & video	(1) ¾" tape		
film & video	computer disk for Avid		
• Dailies On Location		**$2,700**	**$2,300**
film & video	vcr		
film & video	monitor		
film	projector		
film	screening room		
	Budget Totals	**$129, 276**	**$117,104**

INTRODUCING THE FUTURE OF COMING ATTRACTIONS



Now, the path to the future will be wider, and it will go further than you ever imagined. A new Spectrum of Enhanced looks from Deluxe Laboratories will allow subtle differences in colors, contrast and textures that amplify the emotional content of your movies in inexplicable ways. We will provide a variety of choices which individual filmmakers will undoubtedly interpret in different ways. The best thing is that this isn't a refinement of an old idea. It's a new way of thinking about how films are made. We believe this new technology will change the movie-going experience forever. Judge for yourself. See the difference. Feel the difference. **Contact us for a private preview screening. See the future now.**

color by deluxe

Deluxe Laboratories 1377 N. Serrano Avenue, Hollywood, CA. 90027. 1-800-2-DELUXE. 213-462-6171. Hollywood • Toronto • London

News From Steenbeck!

We now have a *new* Larger Screen for 1:1.85 and Super 35

STEENBECK®

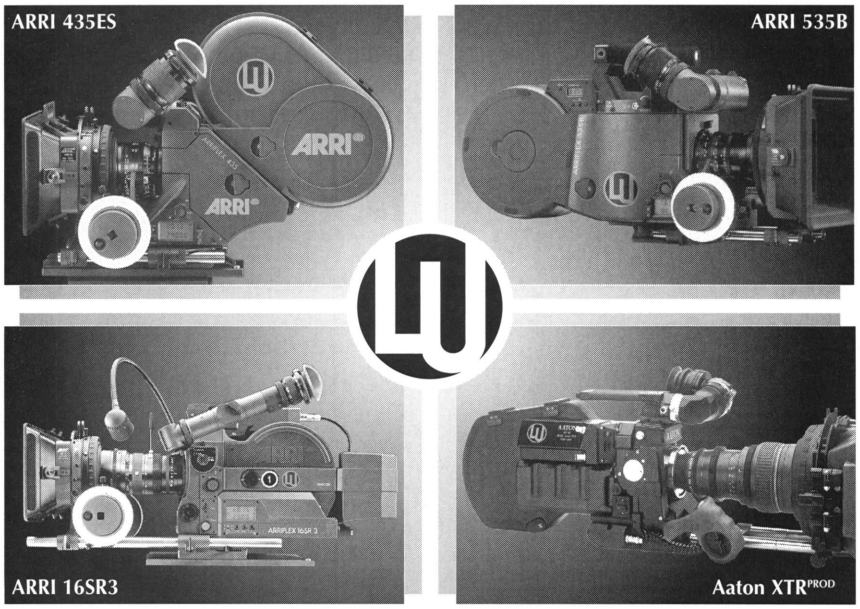
Film • Audio • Video

Sales • Rentals • Service • Parts

Steenbeck, Inc. • 9554 Vassar Ave., Chatsworth, CA 91311 • Tel: 818/998-4033 • Fax: 818/998-6992

FIRST IN SAN FRANCISCO

PROVIDING THE NEW GENERATION OF CAMERA SYSTEMS



ALL FEATURE

- Crisp, bright viewfinders with ample surround safety margins
- Illuminated ground glass markings
- Variable shutters
- Ability to switch from standard to super 16/35 formats
- Integrated time code systems
- On-board crystal speed controls
- Exceptional CCD video assist systems

ALL AVAILABLE EXCLUSIVELY AT

Camera Rentals
LEE UTTERBACH
INCORPORATED

126 Russ St, San Francisco, CA 94103 • 415-553-7700
Fax 415-553-4535 • http://www.lucamera.com/home.html

Penny-Wise, Image-Foolish?

all parties satisfied, with the possible exceptions of certain line producers or studio executives. Keeping that in mind, the accompanying cost comparison chart (see page 36) illustrates the difference between having both film and tape dailies during principal photography versus tape dailies alone. First, some guidelines: this chart is based on a $1 million, 24-day feature shoot; the production would expose an average of 5,000' of negative per day; even in the videotape-only scenario, some amount of film would be printed — in the form of the Print Roll described earlier — and the director and producer would see at least one version of the movie onscreen before the negative was cut; editing would take place on the Avid or some other digital system.

The calculated conclusion is that over a 24-day shoot, it will cost about $12,172 more to have print dailies along with the tape versions. This sounds like a lot of money when you consider that on a $1 million project, $12,000 could mean the difference between having an art department or not. But the equation doesn't end there. Remember that the guidelines listed above state that the director and producer will see at least one version of the film onscreen before the negative is cut. And why shouldn't they? In today's industry, each time someone signs off on a film, his or her career — and future — is on the line. After the overwhelming amount of work it takes to get a movie to completion, it's positively insane for one not to take a look at the product under the same conditions that an audience will experience. Waiting until the answer-print stage to see something onscreen — as listed in Option B — is no bargain, either. By that point, the negative has already been cut, and any changes decided upon after the screening become prohibitively complex and expensive. Thus, for the sake of this comparison, two additional items must be included: the $10,000 estimated cost of film-to-

tape conform (without cutting the negative), which corresponds to Option D; and the amount of time (three to four weeks) that this will add to the postproduction schedule. Suddenly, the $12,172 initially saved by not having print dailies is dramatically reduced. What does that mean to the director of photography desperate to see an onscreen image during the production process? For a feature with a $1 million budget, having both print and video dailies will add just $2,172 to the cost. This represents less than one-half of one percent of the budget.

Naturally, these figures can be adjusted up or down according to the amount of film being shot. However, understand that the cost of raw stock, processing, printing and transfer, among other technical necessities, will remain fairly constant at budget levels between $1 to $5 million. Assuming that one shoots at a 10:1 ratio, the prices will rise only if the total of exposed footage is run up. Barring some dramatic shift in the market or a major technological advance, cost is clearly not a reason to deny the use of printed dailies.

Why the occasional struggle, then? Perhaps on one side there's a lack of understanding as to the need of film dailies, along with inexperience and a false grasp of the economics involved. On the other side is an intense desire on the part of directors of photography to do the finest job possible. For the majority of cinematographers, shooting a film a labor of love. While long hours are standard for every person associated with a production, no member of the team works harder or has a greater sincerity in attaining the best possible look for the story.

Robert Primes, ASC sums it all up: "It's a shame that no one has yet found a device to measure the impact that beautifully realized images have on an audience, and by beautifully realized I mean photography appropriate to the story, not pictures of sunsets. We presume they're affected by the acting because they become fans of the performers. We presume they're affected by the music because they buy the soundtrack. If an audience simply likes the movie, most of the time they give all of the credit to the director. Though what we do isn't measured, anything that takes away from our ability to create mood and beauty through the cinematography hurts the entire package. The certitude of print dailies give you leads to vital, exciting work that pushes the envelope and supports everything else that's going on in the picture." ■

Richard Crudo is a Los Angeles-based director of photography whose credits include Federal Hill *(see* AC *May '95),* American Buffalo *(*AC *Feb. '96) and the upcoming* Music From Another Room. *He expresses special thanks to Kathryn Riccio and Brent Elam for assembling the budget information included in this article.*

Storaro and Bulworth

The inventor of the Steadicam hits the campaign trail with director Warren Beatty and cinematographer Vittorio Storaro, ASC, AIC.

by Garrett Brown
Photography by Sidney Baldwin

The best fortune cookie I ever got said: "You have a unusual equipment for success." True enough and I'm most grateful — for my ticket into this business, and for the the chance to interact with so many of its legendary practitioners. My most recent excursion with the "equipment" was to Beverly Hills and South Central L.A. to work with Warren Beatty and Vittorio Storaro on *Bulworth*, a risky, richly dark political comedy about money, race and a U.S. senator who decides to quit lying and begin rhyming. Co-written, produced, directed and acted by Warren and startlingly photographed by Vittorio (who served as a cinematographic Michelangelo to Beatty's rap-spouting Pope Julius II), it will probably create quite a stir. Did I say risky? A lot of us were out on the edge with this one — Warren most of all. At the end I told him, "Being Bulworth took some balls." He laughed.

Being Vittorio

A three-time Oscar winner for his work on *Apocalypse Now, Reds* and *The Last Emperor* (and a nominee for *Dick Tracy*), Vittorio Storaro is at the height of his powers — famous, successful and charismatic. So, more or less, are a handful of his peers, but Vittorio is unique.

If you watch *Bulworth* in a perfect theater with wonderful projection and a pristine ENR print, you will of course see *what* Vittorio has done; but even a googol of film students sitting in the dark at the Googolplex with diagrams of lamp positions, dimmer settings and gels may not discover *how* he does it, or why, or with what joyous style. Storaro is renowned for his technical mastery, but his success goes beyond footcandles and contrast ratios. I think it has to do with the distinctly unfashionable commodity of character.

Warren compares making movies to repeated trips on a 747: "You can't get off in mid-flight, so when people ask each other back it means there is a shared feeling of confidence and understanding. Vittorio gets better and better. He always has the quality of the picture as his first priority. He's in love with light, he's innovative, he has civility and humor, and he's good for the mood!"

Storaro succeeds where perhaps some of his colleagues falter because of the way he conducts the core relationships at the heart of the business of cinematography. He works for a small number of difficult world-class directors, always with a degree of mutual trust, respect and friendship that is gratifying to observe. I have known him since *Reds*, and if I could bottle his manner on the set — just his enthusiasm and his old-fashioned courtesy — I'd sell it at film schools, or slip it like a mickey into the occasional drink. It would improve working conditions industrywide.

Vittorio no longer refuses to do a picture if he can't bring along the Italian crew with whom he did 30 films. For *Bulworth*, he imported only Fabio Cafolla, the son of his former gaffer, to run the dimmer operation, and he says he is now eager to work with people of different nationalities and views. He has done at least two films each with Fabio, gaffer Gary Tandrow, first assistant Bill Clevenger, video techni-

Storaro and the larger-than-life Warren Beatty work the room at a political rally set within the Beverly Wilshire Hotel.

Photos courtesy of 20th Century Fox.

Storaro and Bulworth

Storaro balances deeply saturated yellow, violet and red filtration for successive moments at "Frankie's" club. Below, assistant Kirby Washington runs the tape on actress Halle Berry.

cian Brad Ralston and myself, and he remains deluded that we are wonderful human beings. Gary says that Vittorio has been an inspiration to him: "Not only is he very spiritual in the way he lights and looks at things, but also in the way he treats people. Warren can be very taxing, but Vittorio knows him and sees the best in everybody and says that he is a genius."

Storaro is a good collaborator, which of course requires a point of view and a gift for resolving conceptual differences like an adult. Despite his considerable accent, as of *Reds* Vittorio was already quite eloquent in English. He is a highly civilized character, and part of his effectiveness lies in the careful formality of his speech and writings, including his "ideations" — the extensive Photographic Concepts he devises for each of his films.

We are introduced to the life of Senator Jay Bulworth in Washington, on a night filled with DARKNESS, interrupted by sudden FLASHES of LIGHT that attempt dramatically to illuminate his Depression, that attempt to distance him from the Sensation of life's deprivation that succeeds in enveloping him during this period of his existence.

The BLACKNESS that surrounds him, the imminent ABSENCE OF COLOR around him, pushes him toward a determined, voluntary desire for a SEPARATION of the two principal Elements of which we are composed, and a movement into a conflict between Life and Death — between LIGHT and SHADOW…

Storaro's serious conceptualizing and his lifetime of preparation for the job are the flesh and bones of his approach. In the 1960s and '70s he began to think about the symbolism of light and shadow in terms of conflicting energies — male and female, conscious and unconscious, natural and artificial. Ultimately, after *Apocalypse Now,* he stopped shooting for a year "in order to study and go deeper into the light — dividing the elements and discovering the world of color." The point is that his work has always been deliberate, based more upon thought and design than just the availability of ambient light, windows or practicals.

Vittorio speaks and writes of quasi-medieval "journeys" and "tasks," of baroque "dialogues of forces." His belief in the actual physiological power of color evokes Johann Wolfgang von Goethe's 1810 *Theory of Colors* which, though based on thoroughly discredited physics, has recently attracted attention because of new interest in the effects of color on behavior.

Vittorio's "ideation" continues, following Bulworth into a series of encounters that seem politically suicidal:

…illuminated by a series of colors: RED — color of emotion, of the beginning of life, of the birth of man; ORANGE — color of familial

warmth, color of the passion for well-being; YELLOW — color of consciousness, of Day, of the Sun, of Light…across the spectrum from shadow to light, to the equilibrium of WHITE…

Storaro has acquired an encyclopedic knowledge of classical painting and sculpture, as well as a huge collection of art books. He prepares laser-printed books of scanned images — pictures and lithographs germinal to the visual scheme for each picture — but like his written manifestos, they are mostly for his own purposes. "It gives me from the beginning a very strong will, a very strong idea how I can do the movie. And not only how, but why… it becomes my own journey… not only visually, but personally… it becomes my joy and my suffering at the same time… I'm married to one major structure and once [the director and I] agree, it becomes my task. From that moment on, I'm ready to pay any price on any given day to achieve it."

Warren said, "I appreciate the fact that he sets himself a skeletal goal… It gives a unity to his work, and he is never repetitious. I think it's good that people believe in things, and when they believe strongly in things I don't share, I don't scoff — any more than I'd scoff at my sister [actress Shirley MacLaine] and the things that she believes in." He told Vittorio, "Why not? If you love it let's do it. I believe in you!"

"Everyone has his own language," says Vittorio. "This is mine. Warren needs different elements. Maybe we say the same thing."

Technique

Storaro's technique is comprehensive and quite different from the usual practices in the U.S. He uses what he calls "puntiform" or point-source lights and "multiform" broad sources, but seldom anything in between. He describes the former as "so tiny, or so far away, that it makes a strong separation between light and shadow, so no area is in penumbra." His broad-source lights consist of the same fixtures, but placed closer, and usually fronted with diffusion. "I was searching for a dialogue between two specific forces — one gives me very specific shadows and the other doesn't give any shadows at all." For what he calls "sculpting" with light, he rides these separate sources on the dimmer board.

On *Bulworth,* Storaro used so-called "Jumbos" — large multi-globe frames with sixteen 28-volt landing lights each — and a whole range of "Mini-Jumbos" in diminishing sizes, as well as a series of "Tornado" lights using 120-volt Fay globes. They all run on 220 volts and are always pre-rigged to be dimmable with his small state-of-the-art digital panels.

"Jumbos" provide incredible punch outdoors. At great distances they become "puntiform" sources, except that, unlike conventional Fresnels, the arrays can be spread out horizontally. Vittorio's gaffer, Gary Tandrow, says, "They are only 10K each, but put out as much [light] as two or three Xenons. The bang for the buck is unbelievable."

All of his lighting instruments on the film were made by Filippo Cafolla, at Iride SRL in Rome, as were the original versions Vittorio ordered many years ago.

Vittorio doesn't use HMIs and tries to avoid fluorescents — he doesn't like the color spectrum of either, and they aren't dimmable. He never erects forests of flags and nets and teasers. Tandrow says, "He will cut, and he likes large blacks and large silks, but if the light comes through the window, then he plays the whole scene around where that light comes from. He'll add a little fill, a little silver board to pick up the eyes. It's amazing — as if the world stood still when that perfect light came. And that's how he does the close-up, without relighting, unlike a lot of other cameramen who would turn off and start over."

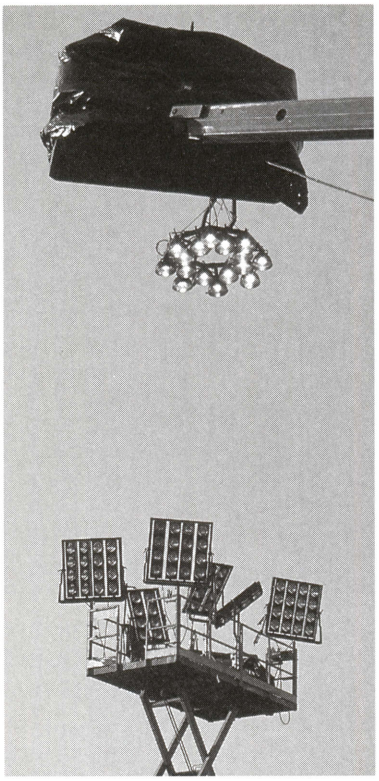
Working from a calibrated monitor, Storaro plays the dimmer board like an instrument as the actors move within the set.

Storaro is a wizard with dimmers. He is one of the modern pioneers of the technique, beginning years ago with relayed instructions to his genny operator. Later he used individual electricians with radios and variacs, and on *One From the Heart,* a big analog dimmer board to control the lighting for my perambulating camera. The hardware has continued to improve and Vittorio's mastery of it is impressive, particularly his placement of lights to accommodate successive close and wide shots, or actors moving within the set, or even the impromptu Steadicam reverse angle.

Vittorio currently uses a black-and-white monitor set up with great care to be, in effect, his contrast glass, so as he plays the dimmers he can judge the ratios from the screen. Incidentally, the preferred video tap on *Bulworth* was the CEI color tap, because of its more accurate gray-scale rendition in black-and-white.

The use of 220 volts for all lighting reduces the diameter of copper needed for the cable runs, and the dimmers yield a great saving of time and energy — fewer trips up

Storaro and Bulworth



Right: A bank of Jumbos and the mighty "Circolare" stand by for night work in South Central L.A. Below: The Beatty/Storaro relationship, based on the duo's mutual respect and friendship, became a cornerstone of *Bulworth*.

ladders to throw in scrims, less heat on the set and longer life for globes and gels. Plus, everybody is visibly energized when the lights go up, and can relax when they go down. It's a great change from the timeless, perpetually-lit studio sets that are so enervating after the 20th hour.

Is Vittorio fast? I think so. With the right pre-rig, the system can be very speedy. I asked if being fast was important to him. Vittorio said, "No. I understand that it can be very useful for the assistant director to know how long it will take if an actor needs to be called, or if they want to break for lunch — you have to tell them a number. But the process of changing from one shot to the other is very fast, so you can tell any number and everyone will be happy. Anyway you will wait for the weather, for the director, for something. I don't care if they tell me I'm the fastest or the slowest. Hollywood, to me, exaggerates everything."

Storaro's work ethic was the subject of much discussion. Key grip Bill Young observed that Vittorio was the hardest-working cameraman he had ever known. On scouts three months before shooting, Vittorio handed out diagrams marked with the location of lamps, generators and cable runs — not just for the location, but for each scene and every potential turnaround. In addition, the respective film stocks needed were listed in advance for the camera department.

Storaro's laboratory practices are scrutinized throughout the industry. Tandrow says, "On *Bulworth* he used the ENR process. It makes the blacks blacker but it also desaturates color, which I didn't know until working on this film. So he overlights with color — he oversaturates. Rosco has made double CTOs and double CTBs, and they are working on a triple lavender that he particularly likes."

Storaro saturated the back wall of one office set with a remarkable deep green, to the extent that the mountainous black bodyguard and the flowered sofa on which he is seated become so camouflaged against the wallpaper that he rivets your eye when he moves — an amazing shot. I am convinced that Vittorio perceives the color spectrum with much greater intimacy than I do. Tandrow agrees: "He's the only cameraman I've ever worked with who can tell perfect greens and magentas. He can walk into a place and say exactly what it needs. We had to shoot under fluorescent conditions and match it, and he knew we needed more green. I couldn't see it with my eye."

Incidentally, Storaro says that *Bulworth* will be his last film shot for ENR. Kodak and Technicolor (which he humorously charactizes as his "mother and father in the creative world"), both have technology in the pipeline that could make ENR unnecessary. Kodak is developing a new print stock with blacks that are said to be as rich as those in an ENR print. Technicolor, however, is reviving a version of the inbibition three-strip process, which provides ultimate color and contrast control and ensures longevity for the original prints. Vittorio told me happily that this new inbibition system may indeed be used for the U.S. release of *Bulworth*.

"Photo-Graphy"

Movie stars, senators and popes (one of whom told me he had never even been inside a cineplex), have similar perks and powers. The Julius II/Michelangelo idea isn't entirely whimsical: as co-scenarist, producer, director and star, Warren Beatty has virtually total control of his world and a correspondingly acute need for the right kind of feedback and advice. But helping the pope is tricky — all of the constituencies normally served by a

Lighting Solutions

Lights Up! has a truly revolutionary lighting system. It's a helium filled balloon light source that evenly distributes a shadowless illumination casting a gentle, glare-free, moonlight quality. *Lights Up!* solves even the hardest placement and rigging problems.

- **Easy Set-up**
- **Saves Time**
- **Easy Placement**
- **Quiet, Safe**
- **No Hot Spots**
- **Impressive photometrics**
- **5ft 2K to 16ft 16K, 32K**
- **8K Tubes**
- **Tungsten or HMI**
- **Flicker free**
- **Other compatible accessories**

LIGHTS UP! INDUSTRIES

LIGHTS UP! INDUSTRIES • 1500 S. GRIFFITH AVE. LOS ANGELES , CA 90021 • 213/746-1170

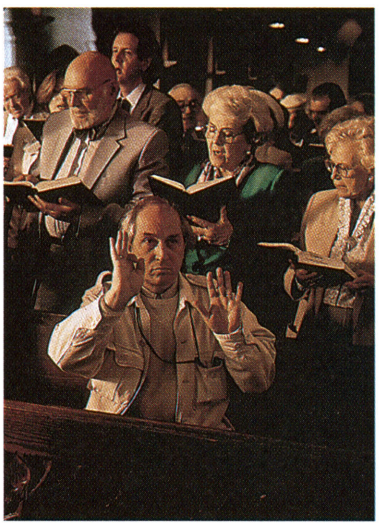
Storaro and Bulworth

Storaro adjusts dynamically changing lighting effects for two very different location churches — in South Central (above) and Pasadena.

cameraman are here wrapped up in one individual. The Warren/Vittorio relationship was well-managed by both men, and it became a cornerstone of the movie. They have learned how to check and balance one another.

"After four pictures you have a shorthand. I can say, 'Do you want to do that?' and it will be examined," said Warren. "Vittorio respects my seriousness in pursuing the theme of the movie. And if it's me, I'll see the flicker of an eyelash and know what he means. Vittorio will wait, and then he'll put it in the form of a question: 'Warren, do you think it might be possible that. . .' and I'll belligerently say, 'Why? What do you think,' and so on. What is absolutely spectacular about Vittorio is that he never loses interest in the process. He never phones it in."

Warren Beatty is an actor's director — he sees the story from inside, from the character's point of view. Vittorio works from the outside in terms of script, direction, cinematography, production design. Warren distrusts big wide shots and



angles that aren't "seen" through a character's eyes, and "interesting" shots that are more interesting than what is happening or what is said. Vittorio is interested in "What" happens on screen. Warren is more interested in "When."

Vittorio prepares a complete offering — beautifully lit, rehearsed, ready to roll. Warren says that he needs to shoot it from the other side. Vittorio's face lights up and he says, "Watch this!" and quickly turns it around. I asked him how he could do that and he said, "I like to light."

He continued, "Don't get me wrong — sometimes I am very susceptible, in the sense that if Warren touches me in the principle, I am ready to leave... I am still very young and can't completely control myself, but I trust Warren and I know that in the end, if the director is not convinced about my idea, I have to follow his. You stay with your principle and you defend it... but you shouldn't be its prisoner." (I have to say, I never actually *saw* Warren touch Vittorio's principle, but anything is possible in Hollywood.)

Warren insists on shooting the movie's first interior-to-exterior location scene in continuity, even though the light will certainly fade before the company can possibly make the move outdoors. Advice from cardinals, bishops and first A.D. Frank Capra III can't sway him. Vittorio says, "No problem."

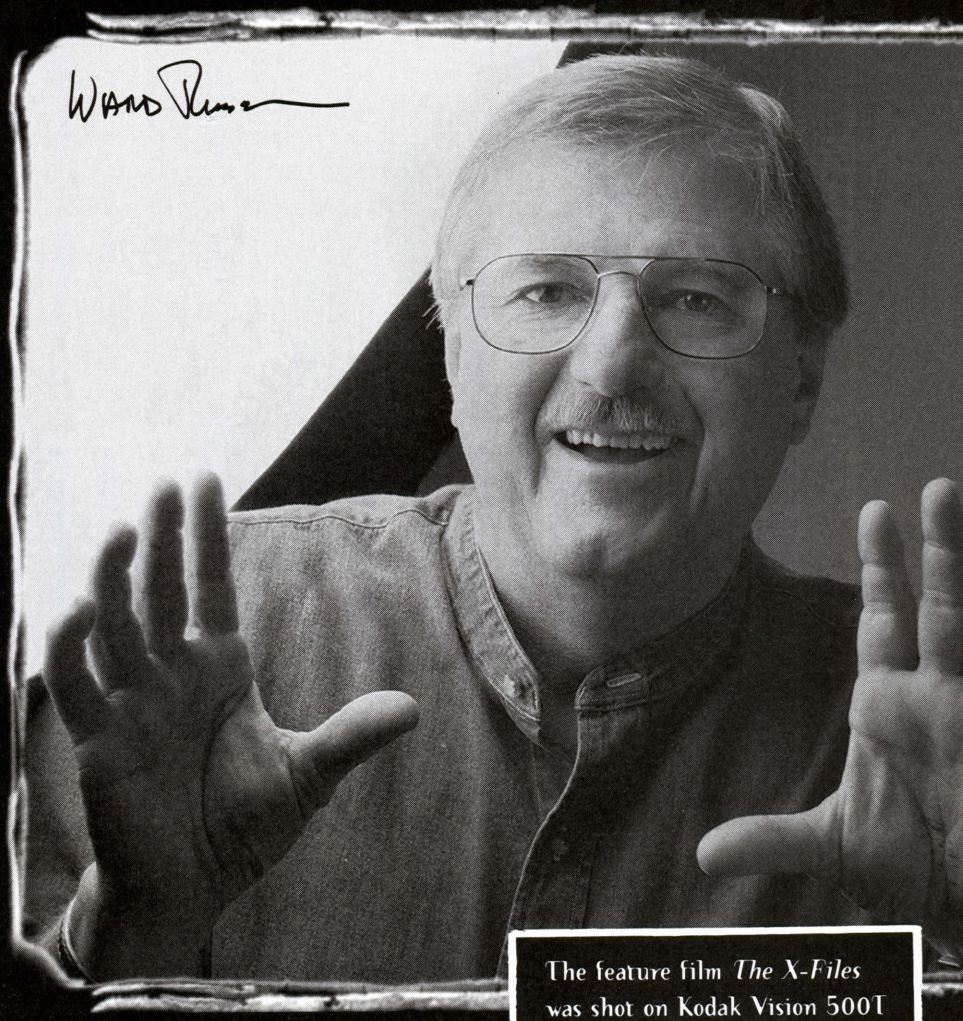
"We went outside," reports Tandrow, "and he put up huge whites everywhere — silks and muslins — and bounced blue-corrected Jumbos

ON FILM

Ward Russell

"We wanted *The X-Files* (the movie) to retain the spirit of the series while expanding all aspects to fill the big screen. Aliens are more believable if everything else is normal, so we designed a look that feels natural, but is also a little unreal. Even when scenes are brightly lit, there is a feeling of darkness. There is no one right way to do that because filmmaking is experimental today. The latitude of the films and lenses allows us to use light and darkness in ways that haven't been tried before. We made darkness our friend. It allowed us to see just enough of the aliens to keep the audience intrigued. Movies are entertainment, and that was our main goal. But, sometimes you also get to make a statement or create a small piece of art, and I hope we did all three."

Ward Russell has filmed hundreds of television commercials. In addition to *The X-Files*, his narrative credits include *Days of Thunder*, *The Last Boy Scout* and *Lawnmower Man II*.



The feature film *The X-Files* was shot on Kodak Vision 500T color negative film and printed on Kodak color print film.

Kodak. The Filmmaker's Film Maker.

To order Kodak motion picture film, call (800) 621-FILM.
For more information visit our web site at http://www.kodak.com/go/motion
© Eastman Kodak Company, 1998. Photography: © 1998 Douglas Kirkland

Two Steadicams, No Waiting

Bulworth was to have the appearance of one of those handheld political documentaries such as *The War Room* or *The Perfect Candidate,* using practical lights and shooting like C-Span on the move. When challenged to "find something intriguing in this world of improvisation," Vittorio said, "Warren, we have to translate the small screen to the big screen, the small plastic video camera to the big metal film camera." He suggested that a couple of Steadicams could do the job without the excessive shakiness that literal handheld would produce on the 40'-wide screen. Vittorio and Warren met with me and my son, Jonathan, to discuss the possibilities, and the happy result was that the Browns got to punch-in side-by-side every day for five months on *Bulworth.*

I was listed as Steadicam operator, and Jonathan as camera operator/additional Steadicam. We worked as equals, without the usual father-son hierarchy, and the flow of humor and good will that prevailed throughout the camera department made the experience a high point for both of our lives. It was a rare treat, and one that I wish every father and son could experience.

Sections of the film that involved Bulworth campaigning were shot on a Steadicam or two, set up in every permutation imaginable. One of us raced down a sidewalk aboard a western dolly while the other ran alongside (guess which was me!). Both of us prowled on foot around the church in South Central, or worked side-by-side, tight and wide, on the bazooka and dolly. We made stately tracking shots in the studio, and rampaged on location. We even shot in relays during one marathan dance sequence, circling around Warren as he attempted to "get down" at a late-night club. Whoever ran out of film would fade into the crowd to reload, and then sneak back into the circle while the other Steadicam was aimed elsewhere.

Bulworth was my best experience ever, gearwise. It was my first chance to test the Master Series Steadicam on an entire picture, and Jonathan and I used the so-called Elite and Film versions respectively. They are "no-tools adjustable" top-to-bottom, and several new bells and whistles made working with them much faster and easier, while also improving the quality of my long-lens shooting. After a brief holiday at 32mm, we would soon switch to the 75mm and 100mm Cookes for most setups, and we both ended up now and then on the 150mm. Readers who know Steadicam will appreciate my resulting addiction to the "motorized stage" feature on the Master Series, which lets you fine-tune the attitude of the camera without touching it. For the first time ever, you can trim while you're shooting, with the result that you can keep the rig exactly balanced for the framing of the moment (telephoto lenses also become more manageable). When Jonathan was working right next to me, the faint burp of my trim motors would make him laugh.

However, "Master Series" and/or "Master Operator" notwithstanding, dignity is sometimes optional in the Steadicam profession. At the Beverly Wilshire Ballroom, much to the amusement of our crowd of extras, Warren suddenly began using me as a sort of voice-operated remote camera, controlled by loud instructions over the P.A. system as he watched the shot on a monitor. Of course I tried to play along, looking like a surly robot mime, and I courteously did *not* point out to Warren the incongruent nature of his repeated command, "Pan down, pan down!"

Two Browns — Garrett (left) and Jonathan — flank Storaro at the entrance to the Beverly Wilshire Hotel.

One of the reasons I used the word "risky" to describe *Bulworth* is that we all tried things on this picture which, in former lives, we might have declined with a snort (of derision, if nothing else). Jonathan and I launched on tough Steadicam shots without a murmur, including some that took us out on the thin edge of what the rig can do and some that consigned Bill Clevenger and Art

Martin to focus-pulling hell. There was something in the air: crew members whose jobs are not usually thought of as adventurous did the never-before-attempted with noticeable panache, each bold thing called for others, and so on down the line.

Warren called it "letting go of what you know." If Senator Bulworth was inspired to plunged off the path and go ranting through trackless brush, Vittorio and the rest of us simply had to keep up. (Warren would encourage us with statements like, "I'm going to go faster. A lot faster!") During one high-speed chase, Warren broke a bone in his heel and had to hobble through the rest of the day's work. By the next morning, his foot was quite swollen, but he had dreamed up the toughest Steadicam shot in the picture and now regretted that he would only be able to do it once — warning me that I "had better get it right on the first take!" I did therefore practice and sweat and lo, it was good, and Warren liked it — and then did 14 more takes. (I think I will may also try to bottle and sell adrenalin — it's the great elixir for those active days of moviemaking and war.)

In hot pursuit of the "C-Span" look, I plunged into surging crowds and screen-jolting collisions with ersatz camerapersons, running backwards at full speed and fending off disaster with all available limbs. Vittorio said later, "What was great about *Bulworth* was we always shot the rehearsal, so there was a live performance from all of us at any given time. As we figured out what was wrong, I was ready with my ideation, [which was] like a plan for a live concert. I was ready to go up and down at the light board, one light to another, following your camera, following the movement. It's very emotional, honestly — like improvising in the old style... like jazz... knowing the main structure, but discovering something new while doing it!" — Garrett Brown

Garrett and Jonathan Brown improvise in the key of "C-Span" at the South Central Church. Assistant Art Martin (at left) was *not* permitted to improvise.

and made it look like daytime — and it was pitch black!" This happened the evening that I arrived, and the speed and exuberance of it made me laugh.

My son Jonathan and I had a great time operating the picture, frequently with two Steadicams side by side (often at focal lengths that would frighten an astronomer!). Vittorio has perhaps the best compositional sense of anyone I know, and he manages to pass it along democratically. The three of us would sometimes be head to head, weighing up the framing elements on our respective monitors. Jonathan reports that when a giant abstract painting on set stubbornly reflected some lights, instead of losing the glass or changing its angle, Vittorio took black tape and added another big abstract shape that covered the reflection and maybe even improved the composition.

Storaro was always right in the thick of things, hands-on, cutting a path through the crowd or happily squashed into the back of the limo between Jonathan and Warren, improvising on his dimmer board with one hand and pulling focus with the other as our midnight convoy of vans and trucks swept up Olympic Boulevard towing the shining black car on its long trailer, festooned with Mini-Jumbos, glowing with Vittorio's long-ago-imagined coruscations of color.

The only time that we ever saw his spirit dimmed was toward the end of a run of very long days. "The thing that is crazy is to work more than the normal hours, because there is a moment when you start feeling that you don't love any longer what you're doing. I don't think I'll do another movie in Hollywood without being very specific — after the normal hour, I have to go home. Because my brain doesn't work any longer. Because my eyes are burning."

Writing with Light

Storaro has often said, "Cinema is 'writing with light' [photo-graphy], in movement." He should probably add something about Color, since he recently stated that he is no longer interested in black-and-white cinematography. He jokes, "It would be like having a piano with only three keys."

Incidentally, he is amazed and disturbed by the number of trucks required for American filmmaking, and he fears that our artistic reflexes are deadened when things are so bloated. It interests me that he will go out and do those $2 million pictures with Carlos Saura (such as *Taxi* and

MUSCO
Light
The world's brightest controllable light source
MUSCO
MOBILE LIGHTING, LTD.
Nationwide:
515/673-0491 • 800/354-4448
Los Angeles:
818/988-1791

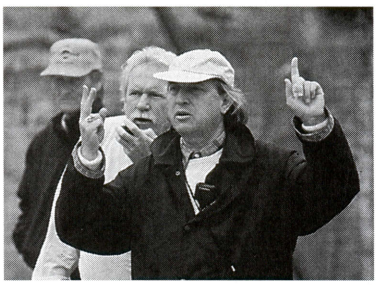
Storaro and Bulworth

the still-unreleased *Tango*), simply because he loves to light. In addition to his best-known films, I admire his mini-series *Peter the Great,* and Saura's recent quasi-documentary *Flamenco.* In every project he shoots there are stunning images, and they stick with you for a long time.

Vittorio's work on *Bulworth* is amazing. I remember the rich chiaroscuro in the Senator's office, and the L.A. City Hall (doubling for the Senate Office Building), with wonderful nighttime and daytime looks, and a great dimmer effect for summer lightning, flickering down corridors from all directions. I remember the light that fell everywhere on Halle Berry, as if Vittorio had suspended the laws of physics and poured it over her like champagne.

And about those Colors — both subtle and in-your-face: maybe they really do mess with the mind. After all, there were fewer suicides once they painted the George Washington Bridge blue, and pink rooms are said to have a calming effect on violent mental patients, and Philly cop cars are less provoking in white than red…

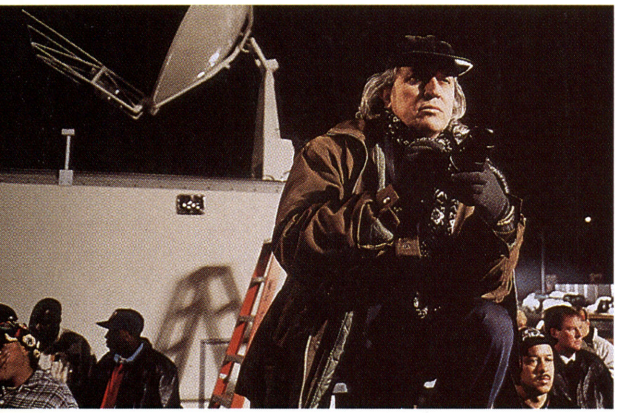
The united colors of *Bulworth* mark Vittorio Storaro's personal journey, as well as Jay Bulworth's last campaign: I remember RED in the church, and ORANGE in the mansion, the YELLOW of the ballroom and the odd GREEN cyclorama at the TV station. I remember the eerily VIOLET streets of South Central. And Fabio's great "Circolare" high on a crane with its rings of aircraft landing-lights focused together into an intense WHITE spotlight from above, scything across the last scene. ■



Top (left to right): 2nd assistant Cheli Clayton, 1st assistant Bill Clevenger, Garrett Brown, Storaro, Jonathan Brown, 1st assistant Art Martin and (seated) 2nd Karl Linde and 2nd Kirby Washington. Bottom (from left): Key grip Bill Young, gaffer Gary Tandrow and Storaro.

Garrett Brown and Cinema Products Corporation shared an Oscar in 1978 for the invention and development of the Steadicam. Brown continues to operate on films and teach Steadicam workshops. He is also the inventor of the Skycam, and of the "Go", "Moby", and "Dive" cams that debuted at the Atlanta Olympics.

Photo of Jacek Laskus by Joel Lipton
PEACE OF MIND.
?
OTTO NEMENZ INTERNATIONAL
HOLLYWOOD TEL 213-469-2774 FAX 213-469-1217 www.ottonemenz.com
HONOLULU TEL 808-524-0052 FAX 808-524-2205 e-mail: paccam@aloha.net
UTAH TEL 801-467-6671 FAX 801-467-6674 e-mail: redmanmovies@juno.com
HOUSTON TEL 713-862-8487 FAX 713-862-1487 www.wantabe.com/cps
MINNEAPOLIS TEL 612-627-9080 FAX 612-627-9789 www1.minn.net/~lthouse



If you knew you had no more than two days to live, how would you spend your time? What would you do? What would you say? How would you change?

Such questions comprise the overarching theme of the 20th Century Fox film *Bulworth,* which reunites cinematographer Vittorio Storaro, ASC, AIC and director/star Warren Beatty for the fourth time. Both men earned Academy Awards in 1981 (Beatty for directing) for their collaboration on *Reds,* an epic story that chronicled the role that American journalist John Reed played in the Russian Revolution. It was a landmark film for Storaro, marking the first use of the ENR process developed by Technicolor Labs.

In 1987, Beatty produced and starred in *Ishtar,* a comedy shot by Storaro. Three years later, the actor/director and cinematographer teamed up again on *Dick Tracy* (see *AC* Dec 1990). Storaro mimicked a comic book look on the big screen by visually punctuating the images with deeply saturated primary colors, and earned his fourth Oscar nomination.

Master of Light and Motion

Vittorio Storaro, ASC, AIC answers *AC*'s questions about his work on *Bulworth.*

Interview by Bob Fisher
Photography by Sidney Baldwin

He received his first Oscar in 1979 for *Apocalypse Now,* directed by Francis Ford Coppola, and his third in 1990 for *The Last Emperor,* a collaboration with Bernardo Bertolucci. To put that achievement into perspective, no other living cinematographer has earned three Oscars, and in the history of the Academy, only Joe Ruttenberg, ASC and Harry Stradling, ASC have received four statues.

Most of Storaro's early films were co-authored with Bertolucci, whom he met while working as an assistant cameraman on *Revolution* during the dawn of both their careers. They collaborated during the 1970s and '80s on such landmark films as *The Conformist, Luna, 1900* and *Last Tango in Paris,* and reteamed in 1994 on *Little Buddha* (see *AC* May '94). Storaro's other notable narrative credits include *One From the Heart* (see *AC* Jan '82), *Ladyhawke, Tucker, Taxi* and the TV miniseries *Peter the Great.*

Bulworth was written and co-produced by Beatty, who also directed the film and plays the lead role. The story opens in Washington, D.C., where Senator Jay Bulworth has decided to end his life. He has a wife and daughter, whom he wants to shield, so Bulworth hires a hit man to assassinate him. The contract requires satisfaction within two days, or the deal is off.

Bulworth then flies to Los Angeles, where he goes through the motions of conducting a grueling campaign schedule. Freed from the burden of having to solicit money and seduce supporters, Bulworth does an extraordinary thing: he begins telling the truth. Step by step, Bulworth discovers that he has good reasons to stay alive.

Bulworth was produced in Los Angeles on a relatively modest $30 million budget. Only several scenes were filmed on stages, including the Washington, D.C. setting and the home of a campaign worker's grandmother. The rest of the movie was filmed at a variety of interior and exterior practical locations in and around Los Angeles, mainly at night. Following are excerpts from a conversation with Storaro about his approach to the picture.

American Cinematographer: When did Warren Beatty first speak to you about *Bulworth*?

Vittorio Storaro: The first time was in a telephone conversation. I was in Rome, and Warren called from Los Angeles. He said that I probably wouldn't want to shoot his new movie because it was going to be an ugly film. He told me the story and said he wanted the audience to follow the senator's journey during his final days as though they were watching it on C-Span [a cable channel whose content includes unedited and uninterrupted coverage of political events and activities].

Do you recall your first reaction to that idea?

Storaro: I had never watched C-Span, but I thought maybe Warren was planning to shoot this film using a Steadicam or a handheld camera once in a while, so the audience could see the images the way they would look if they were shot with a video camera for a TV screen. Warren sent me a copy of his script and two C-Span videotapes, one of the president and another of a governor. Then, we spoke a second time.

What did he say about working together during the second conversation?

Storaro: He said that if we made the film together, he mustn't be Warren Beatty and I mustn't be Vittorio Storaro. We must turn a new page, because it was a time in both of our lives when we were ready to do something different and discover something new.

How can you re-invent yourself and forget everything you have learned?

Storaro: Naturally, you can't forget everything you know, but I approached *Bulworth* as though it was my first movie as a cinematographer. One of my first decisions was that I would ask [Steadicam inventor] Garrett Brown and his son, Jonathan, to operate on the picture [see companion piece by Brown, on

Senator Bulworth (Warren Beatty) is hidden by Nina (played by Halle Berry) amid her extended family in South Central.

Photos courtesy of 20th Century Fox.

Master of Light and Motion

Above: Bulworth is tracked by the media. Below right: The senator addresses a gathering of fundraisers in Beverly Hills, placing particular emphasis upon the quality of the hors d'oeuvres.

page 40, for further details]. Garrett wasn't working on complete movies very often anymore, but I thought I could convince him to make this film. We shot around 90 percent of this movie with the Steadicam.

Why was the Steadicam so important? Why not use dollies and cranes?

Storaro: I explained that Warren wanted the audience to see large parts of this film as spectators watching the story on C-Span. We also wanted to create a feeling of a lot of energy and movement around the main character as his journey progresses.

How much of *Bulworth* was filmed as planned and how much was improvised?

Storaro: I had a clear idea of the structure after I read the script and spoke with Warren. I saw it as a journey that begins with Bulworth in a very deep, dark place in his life. He is so depressed that there is no opportunity to express emotions. In the first scene, everything is black. But the moment he starts telling the truth, he begins a journey toward becoming a more balanced person. I felt we could use the colors of the spectrum to represent the different stages of this journey. You always change little things while you are shooting or after seeing dailies, but *Bulworth* is the film we planned to make.

Is the use of various colors symbolic, and if so, are there universal meanings?

Storaro: Color is part of the language we speak with film. We use colors to articulate different feelings and moods. It is just like using light and darkness to symbolize the conflict between life and death. I believe the meanings of different colors are universal, but people in different cultures can interpret them in different ways. In the opening scene, the camera is motionless and there is an absence of color, which is black. During Bulworth's first campaign stop in Los Angeles, he visits a church in a black community, where the main color in costumes and props is red, a symbol of birth and life. From the church, he goes to a meeting with some Hollywood film producers in a private home. It is a rich setting, where he raises money. Orange symbolizes that feeling of comfort. When he visits an after-hours club, we used yellow, cyan and magenta, the opposites of the three primary colors [red, green and blue] that symbolize daylight. In this scene, Bulworth is considering his subconscious feelings.

The next day, he goes to the Beverly Wilshire Hotel, where he tells people in his own party what he is thinking. It is the first time he speaks honestly about his feelings in front of the members of his party; they don't expect a politician to tell them exactly what he is thinking. The color yellow symbolizes that he consciously knows what he was doing. During a television debate, we used green to signify knowledge, because it is the first time he reveals his feeling in public. Later, one of his campaign workers brings him to her grandmother's house, where he feels safe, believing that the assassin won't find him there. We used blue to signify freedom. Next, he meets a drug dealer, who explains why he uses children to sell drugs. Indigo symbolizes material power. We don't use white in this film until he completes his journey and is a whole person.

How do you deal with the fact that people living in countries with different cultures might interpret the same colors in different ways?

Storaro: Each color has a specific wavelength of energy, which we perceive the same way that we feel vibrations. Even if they aren't consciously aware of it, the audience can feel a difference between high and low wavelengths of energy. They are reacting to that feeling in addition to what they see on the screen.

How did you and Beatty decide upon a 1.85:1 aspect ratio for *Bulworth?*

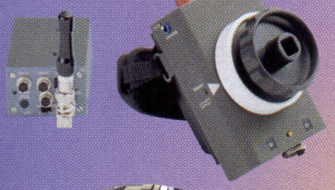
Storaro: It was the right canvas for telling this story. I also used the older Technovision lenses and shot 99 percent of *Bulworth* with the Eastman [EXR] 5293 film because it is clear and sharp with no noticeable

Scriptboy Wireless Time-Code Reader System

Here's the solution to on-location time-code logging. With the Scriptboy, time-code is accurately logged for shot listings and storyboard transcriptions without the need of a direct-wired connection.

Fox Remote Lens Control

This cost-effective transmitter/receiver from Chrosziel offers 16 or 12 bit (for FMG-6 only) precision for remote focus or iris and camera ON/OFF. May also be hard-wired via BNC cable.

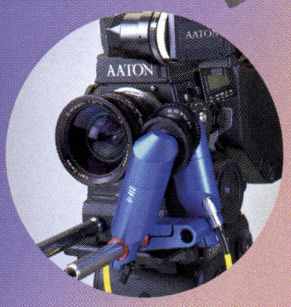


TB-9 Smart Monitor

This 9" 800-line green screen CRT is viewable in direct sunlight, so it's ideal for use outdoors with remote heads, cranes, or video assist. The optional DUO, in-line digital frame line and remote camera controller generates single or multiple zebra bar or black frame lines, border control with adjustable intensity levels and on-screen camera data.

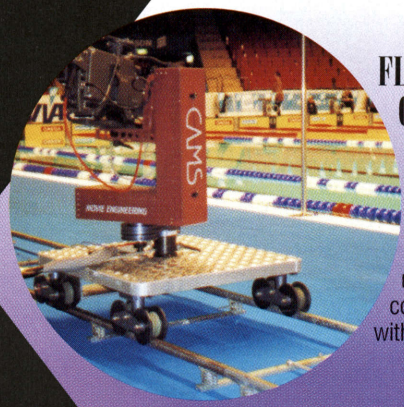
CAMS Remote Tracking System

Combines digital precision with impressive versatility for complex remote pans, tilts, and tracking shots. The slave head mates with cranes, booms, vehicle mounts or RAILCAMS gliding dolly, which can be track mounted overhead, and the new FLOORCAMS. Control via handwheels or tripod handgrip-style.



SPF's ZMG-6 Zoom Motor

Infinitely precise zoom motor in a vertical, quick-mounting system. Ideal for MicroForce control.



FLOORCAMS Remote Controlled Dolly

Now there's FLOORCAMS, a dolly platform that travels smoothly over standard track. Operated by a foot pedal with adjustable speed ratio, FLOORCAMS is ideal for concert or sports scenes. Works with CAMS or other remote heads.

SPF's FMG-6 Focus/Iris Motor

Mounts onto Steadicams, studio cameras, robotics and remote heads. Provides up to 1.1-1.2Nm of torque and a max speed of 115* rpm. Compatible with all popular controls. Mounts faster & easier than any motor available.

*FMG-6 drive gear is twice as large as the Heden so the resulting speed is 40% more.

Movie Tech's Mastertrack

This crane and dolly track system connects to varying track widths from narrow gauge to wide base, to tubular track, and with most other tracks on the market. Lightweight sections fold together for easy transport & storage.

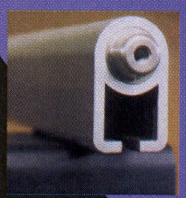
Genio 2-Channel Remote Lens Control (focus, iris/zoom)

Chrosziel's Genio uses advanced technology for faultless transmission. Operator settings are stored digitally via push-buttons. Features input connectors for 2 channels & camera ON/OFF.

* All Sony products are subject to territorial restrictions.

High Def Electronic Cinematography

Get the finest film-style tools at Band Pro including Sony's ground breaking HDC-750* Digital High Definition Camera. Complete with a choice of Canon or Fujinon lenses, Chrosziel 4X4 mattebox, follow focus, zoom motors, and more.



888 BANDPRO
(888-226-3776)

band
PRO FILM/VIDEO INC.

3403 WEST PACIFIC AVE • BURBANK • CA 91505
TEL:818-841-9655 • FAX:818-841-7649

See it all at Showbiz Expo Booth #2242

Master of Light and Motion

Amid Storaro's hypnotically rising and falling slashes of yellow and violet, Senator Bulworth learns to "get down" with Nina after-hours at "Frankie's."

grain. Those decisions were based on the story and the mood we wanted to create. After this film, I shot *Tango* in Univision format [2:1], using the newer Technovision lenses and a combination of 5293 and Kodak Vision 500 film.

How would you characterize this picture — as a drama, comedy or something else?

Storaro: It is a romantic film, a search for truth, and it is also a drama, since the assassin can appear at any time. Bulworth decides that he wants to live, but the man he paid to hire the assassin dies, so that suspense is there. Warren wanted his character to appear to be totally unpredictable. He also wanted the images to be realistic and believable, so the audience would feel as if they were watching the story happen on television. You want them to believe that what they are seeing is really happening, but of course, nothing is realistic in a movie since you select the angle, lenses and lighting.

You said this movie has to feel believable and realistic. How did that jibe with the symbolic use of colors?

Storaro: In a movie like *Dick Tracy,* you have permission to use unnatural colors, because it is a fantasy. In *Bulworth* there is a balance between believability and some very surrealistic visual elements that are justified by the story. [Production designer] Dean Tavoularis, [costume designer] Milena Canonero and I have worked together on different films, so it was an easy collaboration. We discussed these issues, and they built believable color elements into the sets and costumes.

How did you handle lighting in situations where the camera was constantly moving?

Storaro: I have been controlling light with a dimmer board since 1982, when I shot *One From the Heart* with Francis [Coppola]. It provides an incredible opportunity for the actors and cameras to move freely, and it allows me to express myself without restraints. I used an AC generator for the first time [in 1986] when I shot *Peter the Great* in Russia. It is much more reliable, and the cables are less [cumbersome]. During planning for *Bulworth,* we scouted locations, and usually had the art department make sketches for the riggers. At that stage of the production, you have to anticipate where the actor might make spontaneous moves, or the director might change a direction. If you anticipate the possibilities, you can change the light [interactively] during a shot.

Is the main advantage of using dimmer controls an ability to do more complex lighting as the actors move through a set during sophisticated moving shots?

Storaro: You can do whatever you can imagine. In *The Last Emperor,* there is a long, dramatic scene in a conference room. The actors are seated around a table, and no one is moving. We used the dimmer to create the impression that time was passing and the sun outside of a window was setting. The dimmer board can also save time between setups. The gaffer, control board operator and I would arrive, and everything would be ready for us. The early dimmer consoles were made for the live theater and televi-

sion. We designed a new dimmer board for *Tango*. DeSisti Lighting [in Italy] made it for our use.

Is it easier doing your fourth film with a director than the first one?

Storaro: It is like we are making one long movie together, and each time we add some new things to our vocabulary. Warren knows how I think, and I understand him.

Isn't it very difficult working with an actor who is also directing the film? That must be particularly true on this picture, since Warren is in almost every scene.

Storaro: Warren was doing four jobs on *Bulworth,* and that required incredible energy. One advantage today is that we have the video tap, so he can judge his performance on the monitor. Yes, it is difficult, but this film involved so much of Warren's personal vision that I don't see how another director or another actor could have seen and done things exactly the way he did.

Did you use any diffusion or filtration?

Storaro: No, absolutely not. Warren and I discussed this, and we agreed that it was important for the audience to see [Bulworth] as he is, without creating a sense that he is hiding behind something at this moment of his life. The viewers shouldn't see him as Warren Beatty.

Did you use the ENR process during the making of prints?

Storaro: I have used ENR for every movie I have made since *Reds.* It allows you to retain more of the silver in the print film, and which gives you deeper, more saturated blacks. It is an alternative to making Technicolor release prints. I am hoping that the lab is ready to use the imbibition system for making Technicolor release prints in the United States when *Bulworth* is released. Once you have the choice of making true Technicolor release prints, I think there will be no reason for using ENR.

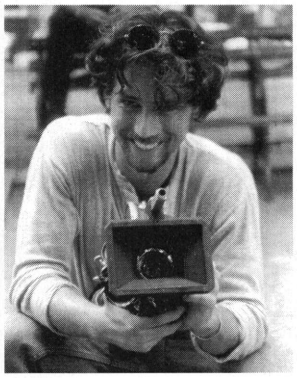
Why do you prefer the title of "cinematographer" to "director of photography" in the credits?

Storaro: Because we aren't directing. That is Warren's job. We are writing with light and motion to tell a story. That distinction is very important.

Have you ever been tempted to direct?

Storaro: People have asked if I was interested in directing since *The Conformist.* My answer is always the same. Thank you very much, but I don't have a need for the power that a director has. I like being a cinematographer. My total instincts, my knowledge and everything I have learned [is combined]. My wish for myself is that step by step, I am learning more about one specific area of creativity — writing with light and motion. ■

LEARN FILM MAKING



WRITE • DIRECT • SHOOT • EDIT

your own short films in our hands-on eight week total immersion workshops for individuals with little or no prior filmmaking experience. Shoot your films with 16mm Arriflex cameras in small classes designed and taught by award-winning instructors.

SUMMER 1998

Four, Six & Eight Week Workshops at

NEW YORK FILM ACADEMY
New York City

UCLA
Los Angeles, California

YALE UNIVERSITY
New Haven, Connecticut

PRINCETON UNIVERSITY
Princeton, New Jersey

UC BERKELEY
San Francisco, California

SORBONNE UNIVERSITY
Paris, France

CAMBRIDGE UNIVERSITY
Cambridge, England

OXFORD UNIVERSITY
Oxford, England

HUMBOLDT UNIVERSITY
Berlin, Germany

All workshops are solely owned and operated by the New York Film Academy.

EIGHT AND FOUR WEEK WORKSHOPS START THE FIRST MONDAY OF EVERY MONTH IN NEW YORK CITY

NEW YORK FILM ACADEMY

100 EAST 17TH STREET NYC 10003 TEL: 212-674-4300 FAX: 212-477-1414
WEB PAGE: www.nyfa.com E-MAIL: film@nyfa.com

Monster Mash

Director of photography Ueli Steiger and a team of experts overcome daunting conditions and logistics to capture the Americanized *Godzilla*.

by David E. Williams

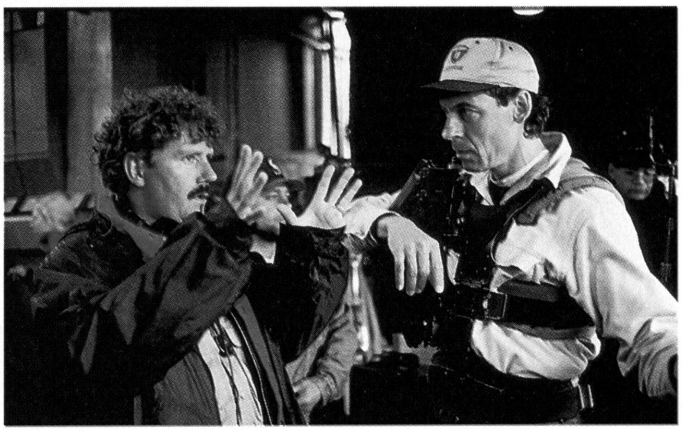
Photography by Myles Aronowitz and Claudette Barius

Arriving on the set of *Godzilla* at Sony Studios Stage 27 in Culver City, I was immediately struck by how much *nothing* there was. "Nothing" in this case refers to a deft use of negative space depicting a huge subterranean tunnel that the towering titular reptile has burrowed under Manhattan by following an established subway route. Walking to the far end of the gaping cavern (about 200' long and 50' tall) created by production designer Oliver Scholl, I dodged jagged broken blocks of concrete (made of textured Styrofoam), crackling electrical cables (piles of hollow tubing with Lightning Strikes units positioned behind them), and burning heaps of wreckage (flickering orange-gelled

Photos courtesy of Columbia/TriStar and Centropolis Effects.

lamps amid clouds of artificial smoke).

Arriving at a flight of wooden stairs, I was told to climb. Five stories later, I found director/co-writer Roland Emmerich (*Independence Day, Stargate*), cinematographer Ueli Steiger, and their crew poised on the "remains" of the Penn Station subway platform, looking out at the cave and working on a scene with the actors. The cast includes Matthew Broderick as Nick Tatopoulous, a scientist who helps the overmatched military track "G" (which of course



means "Godzilla") as he rampages through New York. Steiger was apologetic for not having time to discuss the project in depth at the time, but welcomed this reporter to stay and observe.

Despite the surrounding chaos, it was immediately clear that the filmmakers were having a high time working with one of the biggest stars of international cinema.

Avid G-fans have traced the famed radiation-breathing, 400'-tall creature's path of ruin and panic over the course of 22 films made by Toho Studios in Japan. The first entry was *Gojira* (a name which combines "gorilla" and the Japanese word for whale) in 1954, which was released in the U.S. as *Godzilla, King of the Monsters* in 1956 with new footage featuring Raymond Burr as a stoic Walter Winchell-style reporter who witnesses the stomping of Tokyo.

The new *Godzilla* opens as French nuclear weapons testing causes the great beast to rise from the depths of the Pacific Ocean. It rapidly treads through Central America and heads toward the Eastern shore of the United States, leaving behind a trail of destruction. Reaching The Big Apple, G crushes numerous landmarks, grapples with the U.S. military, and then nests within Madison Square Garden — laying a clutch of eggs in the hope of perpetuating its mutant species with a radioactive brood of baby reptiles. (Note: this film is the first segment of a proposed trilogy.)

Updating and Americanizing *Godzilla* included retiring the traditional rubber G suit and Japanese effects aesthetic. Redesigned by Patrick Tatopoulous (with Toho's blessings), the character is primarily depicted via CGI work done at Emmerich and co-writer/producer Dean Devlin's company, Centropolis Effects. Further work was contributed by Sony Pictures ImageWorks, VisionArts, and other houses. In addition, a few shots were done with a scaled-down animatronic G and a full-scale claw, while a section of the creature's giant mouth — complete with teeth and gums — was built for a scene in which it chomps down on an ill-fated taxi cab. The baby 'Zillas were primarily rendered with full body suits and other traditional mechanical methods. (Look for further coverage in *AC*'s upcoming December effects issue.)

Steiger's assignment to render the practical portions of this larger-than-life tale was prompted by a previous working experience with Emmerich on *Independence Day*, which was principally photographed by Karl Walter Lindenlaub, BVK (see *AC* July 1996). Late in the production, Steiger was called in to replace Lindenlaub while he took a short paternity leave. "While Walter was away, I shot a scene in which the scientists are dissecting one of the aliens, which comes to life and attacks," says Steiger. "I got along well

Opposite: Godzilla treads on unlucky Manhattanites. Redesigned by creature creator Patrick Tatopoulous, the beast was rendered in maquette form, cyberscanned in pieces at Viewpoint DataLabs, and then reassembled and animated at Centropolis Effects using Softimage. While VistaVision was utilized for certain shots, the first unit's 35mm footage made up the primary background material for the digital star. Left: Director of photography Ueli Steiger (left) and Steadicam/B-camera operator Stephen St. John discuss a shot.

Monster Mash

with Roland, and was later asked to work on a unit shooting aircraft interiors for dogfight sequences using poor man's process."

Godzilla was Steiger's first experience heading up a monster-sized film — his other credits as a director of photography include two films directed by Dennis Hopper, *The Hot Spot* (see *AC* Nov. '90) and *Chasers*, as well as *Singles*, *Promised Land*, *Some Girls, Now and Then*, and *Soapdish*. He subsequently did some photography on *The Long Kiss Goodnight*, as well as second-unit work on the plane-crash and motorcycle-chase finalé of *Con Air*. "Those jobs gave me the chance to light and shoot big sets and action sequences," Steiger reasons. "In hindsight, that was prepping me for *Godzilla*, and I was ready when the time came. I was thrilled to work with Roland, whom I feel is a dream director for a cinematographer. He's knowledgeable and has a sense of humor, and I just happen to share a common background with him. We're about the same age and grew up about 100 miles apart from each other, he in southern Germany and me in Zurich, Switzerland. We also share many things aesthetically, so not a lot has to be said most of the time, which is helpful."

Also assisting Steiger was a team of effects technicians that was already in place when he joined the production, primarily composed of *Independence Day* veterans. This included visual effects supervisor Volker Engle, who accompanied the first unit throughout the shoot since so much of their footage would be later digitally manipulated. As he had little effects-work experience going into *Godzilla*, Steiger candidly reports, "I quickly decided that I would not pretend to know anything that I didn't really know. I didn't need to be 'all-knowing' just because I was the director of photography. Reading the script for the first time made me quickly come to this position. Every page had something that made me ask, 'How are we going to do this?' But the key to approaching this kind of story is to break it down into pieces that can be understood, planned and finished. You can't look at it any other way, or it would just be too daunting.

"I could also rely a lot on Roland, who has immense knowledge of visual and special effects. He became interested in filmmaking because of his interest in effects work. That was key; otherwise, I would have been nervous to take on a film like *Godzilla*."

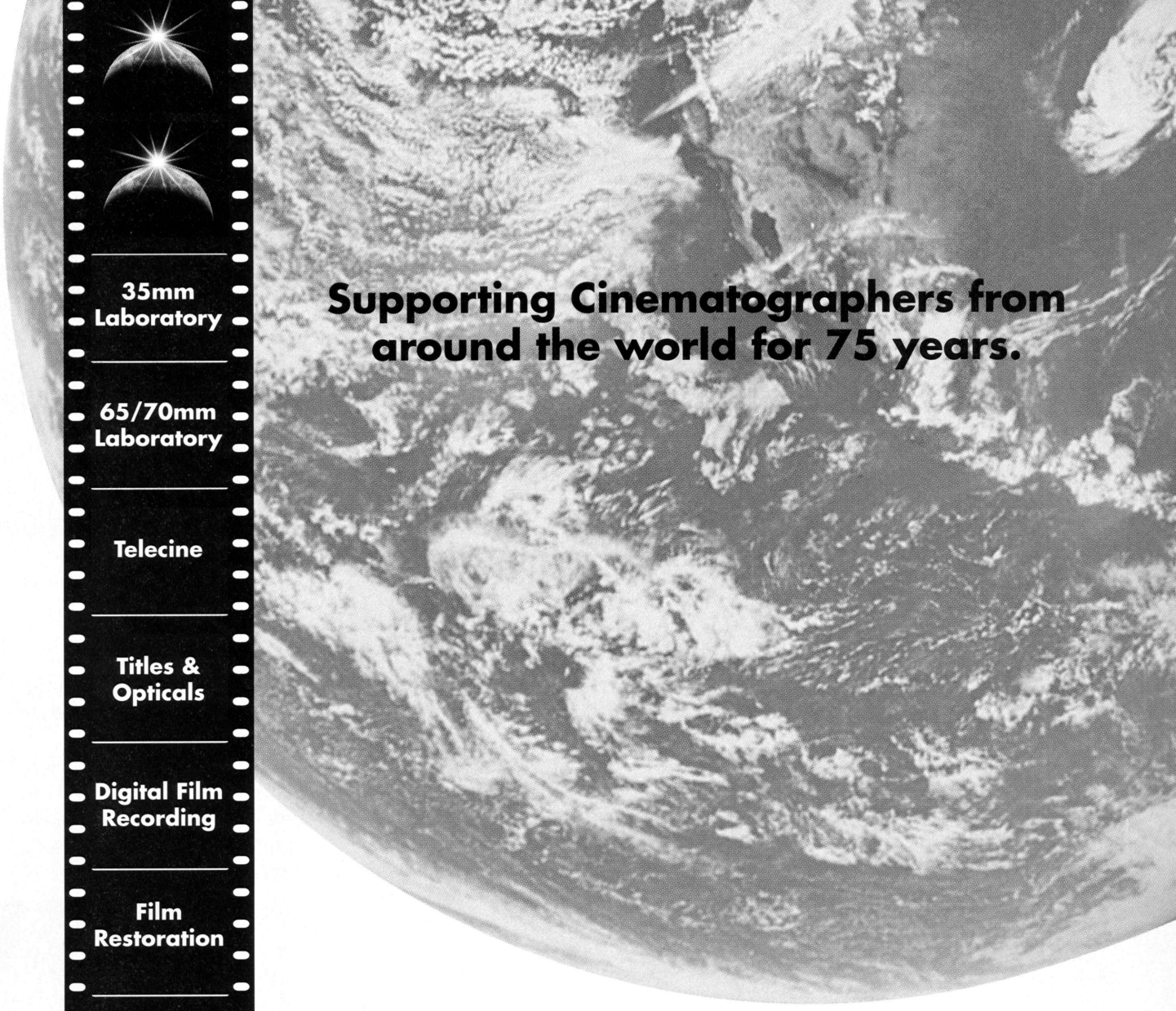
Attack!

Extensive preproduction tests were done in order to practically plan *Godzilla*'s lengthy nighttime location work in Manhattan, as well as to lock down the methodology by which the digital G could be added to live-action 35mm footage. "The first test was an actual scene from the movie,"

Steiger says. "It included Godzilla walking through New York while looting is going on. We shot it in downtown Los Angeles and went through every level of production, including how to dress and light the streets, and how to work with the city to get our equipment in and out for a nighttime shoot. That test came off so well that it will be in the finished film. We also shot two teaser trailers. The first involved a group of students touring a museum to see the skeleton of a *Tyrannosaurus rex*, which is then crushed by Godzilla's giant foot coming through the ceiling. The second involved an old fisherman, Godzilla rising out of the water, and a pier being destroyed; this involved model work, a greenscreen shoot, and location work done at Falls Lake at Universal Studios.

"These shoots allowed us to go through every step of the production process to a final print. This helped from a budgeting standpoint, as it

Right: Co-writer/director Roland Emmerich explores one of the small side tunnels leading from the Penn Station cavern. Below: Scientist Nick Tatopoulous (Matthew Broderick, far left) aids the military in tracking Godzilla. The combination of warm firelight effects and cool Xenon beams became a common motif throughout the production, helping to stie the film together visually despite the fact that the project was shot at diverse locations and sets.



Supporting Cinematographers from around the world for 75 years.

35mm Laboratory

65/70mm Laboratory

Telecine

Titles & Opticals

Digital Film Recording

Film Restoration

Member of WMPLA

CFI

CONSOLIDATED FILM INDUSTRIES

A CONTINENTAL GRAPHICS HOLDINGS COMPANY

959 Seward Street, Hollywood, California 90038
(213)960-7444 Fax: (213)962-8746
www.cfi-hollywood.com

Service • Quality • Capability • Experience

Monster Mash

Above: Xenon beams illuminate the U.S. Army's trap for Godzilla at the Flatiron Building. Rain, smoke and fog effects were used throughout the film, backlit blue to create separation from the architectural lighting effects done on the buildings. Right: The technocrane supplied by Telescopic Crane Corporation was effectively water-resistant, but the multitude of electronics on the arm were temperamental due to constant dampness. Despite time spent troubleshooting the rig, Steiger found it to be invaluable throughout the show.

showed what the scope of the production would be in terms of lighting and grip work. What does it mean to be lighting up five city blocks every night for weeks at a time? What will we need and what will it cost? This was especially important since we would never be able to pre-rig anything in Manhattan with the exception of some cabling. Most of our equipment had to be set up each night and cleared out by daybreak. Also, we were going to be shooting over the summer — with short nights beginning at 9 p.m. and ending at 5 a.m. — in order to meet our release date. All of these things were addressed during the tests."

One key to the success of these trials was Steiger's crew. "An important thing for me was getting Jim Grce aboard as my gaffer," the cinematographer says. "We have worked together many times before, and prior to *Godzilla* he had done *Starship Troopers, Heat* and *Showgirls.* It helped that he'd had experience on big shows. He had also worked with Sony Pictures Studios before and had a good relationship with them, which was great because Sony supplied us with most of our lighting equipment [in both New York and Los Angeles].

"My key grip was Tony Marra, with whom I had worked a bit on *Independence Day.* He and Jim had worked together before and were the foundation for a good crew. This film was a real collaboration from all departments." Steiger's team also included camera operator Nathaniel Goodman, first assistant Joe Sanchez, second assistant Gary Camp, and B-camera/Steadicam operator Stephen St. John.

The production's early test shoots also suggested an overall photographic approach to the film, as well as the manner in which G would be presented. As Steiger explains, "We have this massive creature, and the less you see the more powerful it is. And while the creature is a CG creation, the surroundings for it had to be photographed correctly so that the elements would fit together. To accomplish that, we ended up shooting mostly at night and creating a lot of atmosphere with smoke, rain and fog effects. It's raining through the whole film, which of course made it much more difficult to shoot. Not only is everything going to be wet, but when you have wide shots, the rain and smoke have to be lit correctly in order for them to read right on the film. The whole film should look rough and dark."

To that end, Steiger is using Technicolor's ENR process at the internegative stage to "dramatically deepen the blacks and desaturate the colors," as well as their new dye-transfer printing process on the final prints, which "allows you to control and deepen specific colors without affecting the blacks." However, of the 6,200 prints of *Godzilla* the lab is making, only 1,000 will benefit from the dye-transfer process. (This new printing methodology will be covered in an upcoming issue of *AC.*)

Given the vertical nature of *Godzilla*'s primarily urban milieu and irradiated star, Steiger determined that a combination of a widescreen frame, extreme high and low angles, and wide lenses suited the picture best.

Both Emmerich and Steiger are believers in using widescreen to convey emotional impact and scale, and the director of photography utilized the Super 35 process to

MAKE MAGIC HAPPEN

...THE SOURCE FOR UNIQUE EFFECT CAMERAS & LENS SYSTEMS

NEW - CINEWAND T5.6 Borescope Lens System
Extreme Close Focus, Great Depth of Field, Water Tight

PHOTO-SONICS High Speed Cameras
All Models, Color Video Assist

CLAIRMONT Swing/Shift Lens System
Featuring Zeiss Optics, NEW 14MM T2.8 Lens

RENTALS - SALES - SERVICE
CUSTOM OPTICAL DESIGN

247 west 30th street nyc 10001 212 268 0028

cine magic
INTERNATIONAL

Monster Mash

Right: French scientist Phillipe Roche (Jean Reno) warns his unwitting cohorts about the dangers of nuclear testing. Below: Godzilla faces off with a puny human adversary. The creature's size ranges widely throughout the film, depending on what looks good in any given shot. This cheat was similarly employed by visual effects legend Willis O'Brien in the granddaddy of all giant monster movies, *King Kong* (1933).

achieve his 2.35:1 compositions. "I've shot other films in anamorphic, but I'm not a purist," he submits. "Since James Cameron started using Super 35 — and all of his films look fantastic — I've been convinced that the format is great; nobody can really tell the difference between Super 35 and anamorphic, and it's so much easier to use. Plus, on *Godzilla*, we often had so many cameras running — on the principal units as well as the effects units — that it would have been impossible to shoot the film in anamorphic. Sometimes we had as many as 15 cameras rolling, including Panavisions, Fries Mitchells for motion-control work, and others.

"Of course, you do have a bigger negative in 'Scope — there's a whole argument one can make on that point — and Super 35 is a compromise, but you have to look at your situation and make a decision based on what's most important for the movie, rather than thinking from a 'purist' mentality or from the perspective of what will look good on my reel. The advantages are very clear to me: lighter cameras, being able to throw a still-photo lens on an Eyemo set up somewhere, and using the Steadicam more freely. On *Godzilla*, we wanted to be alive, mobile and gritty, so the choice was obvious.

"Additionally, a large number of our main-unit shots are actually digital effects shots. Since we use only half the exposed negative area in the final Super 35 print, the frame could be easily repositioned and adjusted vertically for the creature."

Steiger used Kodak's Vision 500T 5279 for night exteriors and interiors, and Vision 200T 5274 for day exteriors. "I'd used the 500T before on a commercial, but we were one of the first features to get the 200T stock," he says. "I didn't get a chance to test it, and while I trust Kodak, it took a bit of tweaking to learn how to use the new stock, but the results were worth it. The grain structure on these films is amazingly sharp, and of course I didn't use any lens diffusion at all because of the Super 35. Our rain and smoke softened things a bit, but we got on film what we could see."

Steiger notes that he and Emmerich are both "big fans of using wide lenses and clearly showing the audience what's going on. I hate the long-lens look that is so popular in commercials, and if you have a huge creature walking through a city, you want to be wide, you want to *see* what's happening and where you are. On *Godzilla*, we often didn't even shoot tight close-ups because we knew they wouldn't be used. Like me, Roland sometimes likes to do a whole scene in a single shot. That might take a while to set up, but if it works, you can save time."

When it came to optics, Steiger relied heavily on Panavision's 5:1 and 11:1 Primo zooms. "Other people will disagree with this, but I just love zooms and prefer them to primes at almost every level," he attests. "That doesn't mean you have to be zooming in and out all the time — although I do love to sometimes zoom within a shot — but using one allows you to have all the focal

lengths in the world on your camera at once. You can create the exact frame you need, show it to the director, and then shoot. The 5:1 and 11:1 Primos are fast enough [T2.3 and T2.8, respectively] — I don't like shooting wide open anyway — so I used them for most of my night exteriors, and hardly ever used primes.

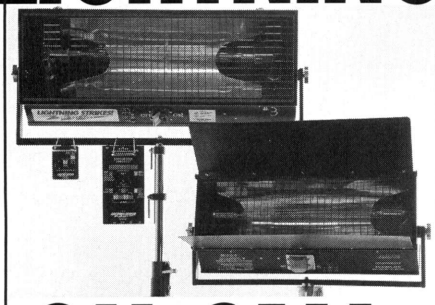
"Of course, you have to understand the zoom lens to use it properly. For example, you can't become lazy and not move the camera simply because you can zoom in. If you're doing matching reverses with a 24mm lens, you still might have to move a wall because you can't get the camera in behind one of the actors with the 24mm. You can't just creep out on the lens instead, because that's changing the perspective. You have to know what a 24mm focal length will do and how it will compare to the tighter focal length you might use for your close-ups."

Stomping Manhattan

The production began four weeks of filming in New York City in the spring of 1997, but the shoot proved to be problematic due to the size and scope of the production. Traffic was stopped dead as *Godzilla* shut down portions of Madison Square Park, Central Park, Wall

COMPREHENSIVE MOTION CONTROL AND SPECIAL EFFECTS PRODUCTION
36'- 0"
Virtual straight line
42'- 0"
Trailer
10'- 0"
8'- 0"
21'- 0"
27'- 0"
19'- 0"
16'- 0"
IMAGE
G
818.761.6644
fax 818.761.8397
production@ImageG.com
http://www.ImageG.com

LIGHTNING



ON CALL.

When it comes to simulated lightning, there's lots going on at Lightning Strikes!

Like more watts. Now our heads come in **40,000, 70,000, 250,000 & 500,000** Watts! Maybe that's why the Academy of Motion Picture Arts & Sciences bestowed a 1995 Technical Achievement Award to the Lightning Strikes! designers.

And that's why Lighting Strikes! has illuminated hundreds of films, television productions & music videos worldwide.

Advantages:

- Incredibly Bright
- Safe
- Dimmable
- Lightweight
- Undulating Pattern
- Compact
- Programmable
- Remote Controlled
- Customized Controls

For rental call:

LIGHTNING STRIKES!®
patented
800-321-3644 Fax: 213-461-3067

6601 Santa Monica Blvd, Hollywood, CA 90038 USA
e-mail: litestrike@aol.com web: www.lightningstrikes.com

Worldwide Agents:

Chicago	Panavision	1 773 267 1500
Dallas	Panavision	1 972 869 0200
Detroit	George Lieber	1 810 713 9521
Nashville	Imagemaker	1 615 244 1700
New York	Bob Potter	1 212 243 3164
Orlando	Steve Heller	1 407 896 7960
Salt Lake City	Redman Movies	1 801 467 6671
Amsterdam	Flashlight	31 20 463 1000
Auckland	Prof. Lighting Svc.	64 9 525 2200
Bangkok	Siamlite	662 934 6721
Barcelona	Camera Rent	343 314 5000
Beijing	Hua Yuan	8610 6205 7044
Berlin	Dedo Weigert	4930 6704 4487
Brussels	B&L Lighting	322 466 8686
Copenhagen	Bico	45 35 840 295
London	Cirro Lite	44 181 964 1232
Madrid	Camera Rent	341 651 3399
Malaysia	FEG Enterprises	62 635 2545
Manila	R. S. Video & Film	632 816 3737
Mexico City	Cinepronic	5236 20 0513
Montreal	Moli-Flex/White	1 514 939 1989
Moscow	Dedo Weigert	7095 217 5137
Munich	Dedo Weigert	4989 356 1601
Oslo	Hallvard Braein	4722 699 262
Paris	Key Lite	331 4984 0101
Rome	Panalight	396 7290 0205
Seoul	Cineall 21	82346 557 3976
Singapore	Film Equipment Gallery	65 338 0341
Stockholm	Dagsljus	468 722 0180
Sydney	Reg Garside	612 9452 5972
Taipei	Tai Shun Movie Equip.	8862 975 7738
Tokyo	Sanwa Cine	813 5210 3322
Toronto	William F. White	1 416 239 5050
Vancouver	William F. White	1 604 983 5300

Monster Mash

Street, 5th Avenue, the Broadway area, and the Flatiron District. The local news included nightly updates about the show's filming schedule so people could avoid traffic jams.

With artificial storms forecast throughout the *Godzilla* shoot, rain deflectors were essential in order to ensure the sharp images needed for the ensuing digital work. These devices typically incorporate a high-speed rotating optical glass disc mounted in front of the lens, which throws the water off via centrifugal force before the image is blurred. "We had every rain deflector in the world on this show, and none of them worked very well," Steiger recalls with a smile. "Panavision had several versions, including a little one for the Steadicam. We also had a deflector which blasts water right off the lens using compressed air. It works well for about 10 seconds before the air valve freezes shut. It's also very noisy.

"This was another reason to use zooms," the cameraman continues. "Switching lenses would have required us to continually remove and reattach the rain deflectors, which takes far too much time."

The constant downpour began to impact the schedule on other technical levels as well. "We had a large camera department, and waterproofing the gear was difficult," Steiger says, "particularly when it came to the remote-controlled equipment. We had a technocrane [from the Telescopic Crane Corporation] throughout the whole shoot, which is a tremendous tool. There were a lot of things we couldn't have done without it. For example, on the Madison Square Garden set, there was so much wreckage and rubble all over that it was much too time-consuming to lay dolly track, and difficult to navigate with the Steadicam. The only way to effectively move the camera in there was to use the technocrane, which we could position and then utilize in almost any direction.

Silks dampen the harsh sunlight as an overpass collapses in the "Big Apple," as shot in Los Angeles.

"All of these tools are great if you have nice weather, but whenever you shoot a movie it's usually not like that. On the technocrane, the cables for the FTZSAC, rain deflector, video tap and remote head were all running down the arm. If just one of those systems went down, a lot of people were waiting and not happy, so the pressure was intense. My first AC, Joe Sanchez, worked hard to keep it all going. I was just dying sometimes, but fortunately, Roland was patient because he understood."

Illuminating the cityscape for the digital G's later inclusion was an undertaking that demanded two separate lighting strategies. Explains Steiger, "Our creature is hundreds of feet tall — or taller, as the effects people will cheat his size depending on what looks best in any given shot — so there was no way to light the entire area he might walk through. The space would be just too big. Jim Grce and I decided to light the streets and buildings to create a frame for the action, but we also had to invent separate sources for the monster.

"We had large night exteriors while shooting in New York, because the only reason to shoot there was to utilize the landmarks. Literally every shot we had there was a big setup — looking down Broadway for blocks and blocks and then panning 180 degrees to look up the street so see another 20 blocks. Depending on the shot, we would sometimes just light three or four blocks of buildings, our rain, something in the far distance, and then our main subject. It was a cheat and a constant compromise, but that's part of the job."

Gaffer Grce elaborates, "Our experience on the preproduction tests told us that we didn't have to light everything, which cut our expected lighting order in half. Because we're always looking up to see Godzilla, we couldn't often use lights on rooftops or Condors, since we would see them. That actually saved us a lot of time, though. We wound up creating an architectural effect on the buildings by using about 50 Maxi-Brutes on low stands right on the sidewalk. We then gelled them with ½ CTO or CTS to match the warm sodium-vapor streetlamps.

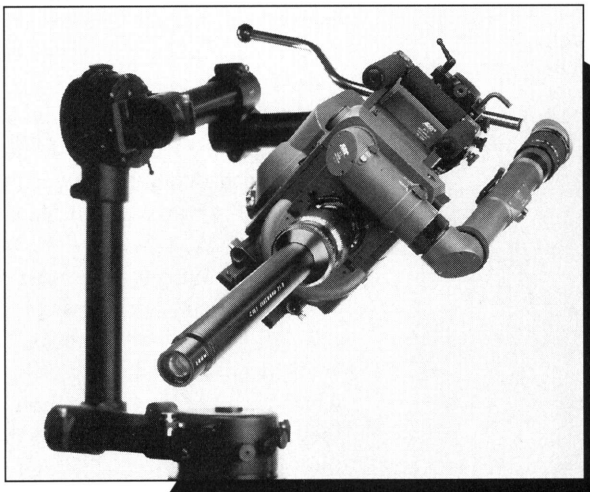
"We could sometimes use Condors with Pars 64s to backlight the rain. To create separation, the rain was generally in a cool ½ blue range, which contrasted well with the buildings. We'd also sometimes sneak in the Bee Bee Light — which has three 18Ks — or a Mini-Musco.

"We'd then pick out the biggest object we could find in the distance and light that up very brightly. On Park Avenue, it was the Met Life Building. So we had our foreground and background lit, and on a long lens it looked as if we'd lit the whole street. That approach generally got us up to a stop of around a T3.5, which provided some depth."

After these enormous scenes were set up, the actors were lit, primarily with Kino Flos. "They're just quick to bring in and use," Grce

35mm
16mm

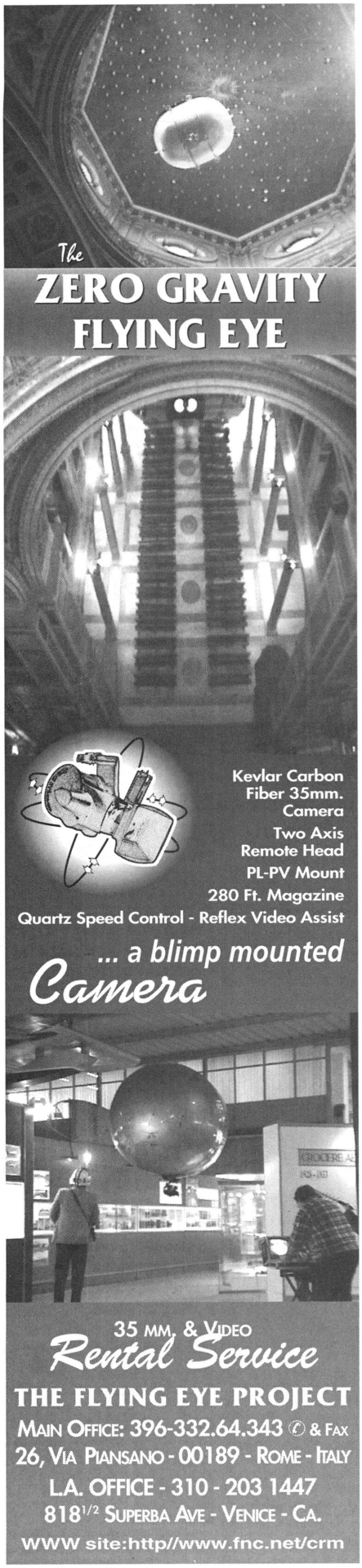
Motion picture cameras, lenses, support, filters, accessories. State-of-the-art technology with a greater range of creative choices!



exquisitely maintained custom camera packages

schumacher
CAMERA

Chicago 312/243-3400



Monster Mash

states. "We'd just bring in a couple of four-bank units on stands, color them up to match the street lighting and start shooting. They also allowed us to easily do a combination of soft and hard lighting in the frame."

Recalls Steiger, "We did our biggest night sequence in front of the Flatiron Building, in which the Army baits a trap for Godzilla with piles of fish. In that scene we were literally looking 360 degrees, so our lighting solution was to use practicals. For our key, we disguised two Mini-Muscos as military work lights which we could have in the shot. For the area around the trap, we built five Army-style mini-lifts with a rising column fitted with lamps."

"Those were made by building three nine-lights into a triangle and then mounting them to big theatrical crank-o-vators," Grce explains. "We put hoods on them and painted them olive drab. So whenever the military was around, we were able to bring these things out and use them as practicals, which gave us a base light.

"As for the Mini-Muscos, we tilted each of the lamp heads a bit to diminish the flare into the lens and gelled them with ND 9 so they didn't just burn out. We even have a few shots showing them unfolding and rising up, which is pretty dramatic and adds some production value to the show."

"We utilized practicals throughout the New York scenes," Steiger continues, "primarily 1K Xenon searchlights mounted on Humvees, which we could use to motivate sketchy lighting for Godzilla as the Army chases him through the city. Of course, that created a lot of work for the CG crew because our beams of light had to interact with the digital creature, but Roland helped push the idea through."

Each of the Humvee-mounted 1Ks ran on two 12-volt batteries coupled with a power inverter. Grce explains, "It took some testing to get the right inverter, but they worked well. Between the Xenon flashlights carried by the characters and our Xenons on helicopters and Humvees, we were able to create a moving beam in frame whenever we needed to." This was another technique that had been devised during *Godzilla*'s preproduction test shoots.

The gaffer adds that different Xenon flashlight sources were assigned to specific parts of the cast: "The American military carried [Mag-Lite style] Sure-Fires, while the French team carried Xenotech's [larger, handheld] model. We also added a ½ CTS gel to them just to bring the color temperature down."

Steiger additionally credits *Godzilla*'s East Coast team (including gaffer Rusty Engles, rigging gaffer Ken Connors and key grip Dennis Gamiello) for the successful completion of the New York portion of the shoot.

Bi-Coastal Creature

After wrapping in Manhattan, the filmmakers traveled to the Hawaiian island of Oahu (to shoot G's romp through Central America) and then returned to Los Angeles. "We started our L.A. filming in the downtown area, which stood in for Manhattan," Steiger says. "That was five weeks, and then we moved into an industrial zone just east of there for a sequence set at the Chernobyl reactor site, which is where our story finds Matthew Broderick's scientist character." From there, *Godzilla* settled into the stages at Sony Studios, where key grip Tony Marra and his crew had already begun rigging sets, communicating with Steiger and Grce by phone and fax. "We had three major stages," Steiger remembers. "By the time we got there, Tony had everything ready so we could just start shooting."

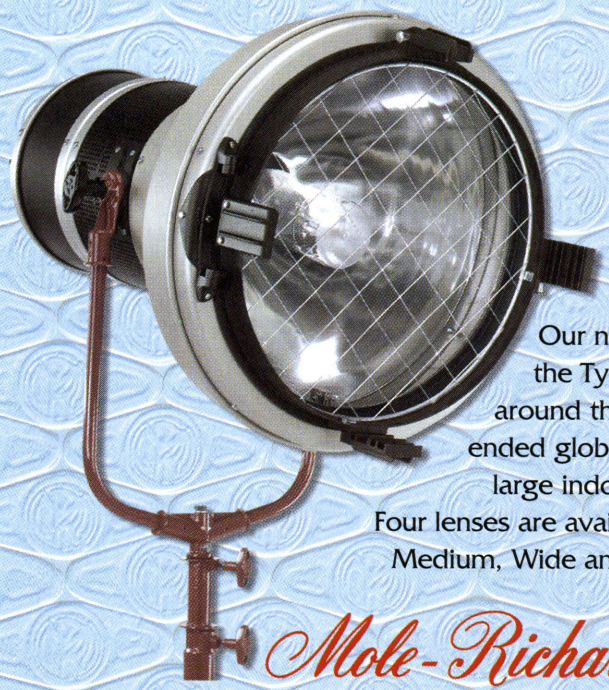
The five-week shoot in down-

town L.A. primarily consisted of a "lengthy chase sequence in which our heroes follow Godzilla through Manhattan and finally discover the tunnel under the city, which leads them right into the nest in Madison Square Garden," Steiger explains. "This is a 30-minute section of the film and we spent nearly half of our New York schedule on it, getting all of the landmarks. Then we faked what we could in Los Angeles, which was much easier to do."

The general street lighting approach in Los Angeles was similar to what had been done in New York. Submits key grip Tony Marra, whose credits include *The Rapture, Kansas City, One Fine Day* and the engineering of the stunning Titan crane shot which opens Robert Altman's *The Player*, "Jimmy and I never crowded the frame too much. There was some talk about digitally removing fixtures in post, since most everything was a visual effects shot, but we didn't rely on that too much. But sometimes Roland would say, 'That whole side of the shot is going to be matted out. You can put a truck in there if you want to.' That really made things easy. Otherwise, we mainly hid our Maxis behind cars, garbage bins and wreckage. The grip crew would then go in and place diffusion, gels and flags at every lighting point. Like Jimmy, I had a grid map that detailed all of the lighting, on the ground and on the rooftops."

In order to photograph G's point of view as he chases a hapless cab, Marra constructed a unique car rig consisting of a Shotmaker truck and an Enlouva III crane. He recounts, "Normally, when you do camera car stuff with an arm, the picture car is following you and you're moving the arm around to get nice moving shots. But to get Godzilla's POV, we had to chase the cab while swooping up and down from 26' up. So the arm had to work off the front end of the Shotmaker, with me and a couple of my dolly

Introducing the 12,000 Watt HMI Molepar®



New for 1998

Our newest HMI Molepar,® the Type 6601, is designed around the 12,000 watt single ended globe. Perfect for lighting large indoor and outdoor sets. Four lenses are available (Narrow Beam, Medium, Wide and Extra Wide Flood).

Mole-Richardson Co.

Tel: 213·851·0111 Fax: 213·851·5593 E-mail: info@mole.com Internet: http://www.mole.com
937 N. Sycamore Ave., Hollywood, CA 90038-2384 U.S.A.

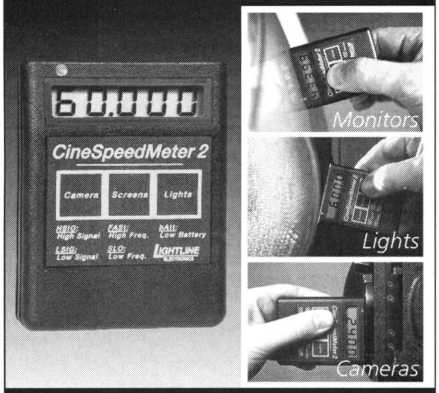
THADDEUS B. KUBIS

1 800 708.2202

SPECIALIZING IN MOTION PICTURE STILL PHOTOGRAPHY

www.tbkphotos.com E-MAIL:tbk@sprintmail.com

CineSpeedMeter 2
Reads Monitor Scan Rates To .001Hz
Checks for Light Flicker
Monitors Generator Frequency
Checks Camera Frame Rates

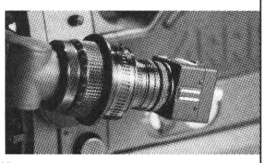


Stocking Dealers:
Hollywood/ Mole-Richardson,Gunner Camera
New York/ Barbizon Electric
Miami/ ESS International
Vancouver B.C./ William F. White,Ltd.
PS Northern Lights

LIGHTLINE ELECTRONICS
7511 SW 69th Ave. Suite10 Tel:(503)246-5835
Portland, Oregon 97223 Fax:(503)246-2871
Visit our site @ www.lightlineelectronics.com

New Products
from MAZILVIEW

VIVI-TAP VIDEO ASSIST



- High res. lens
- Uses compact b&w CCD camera
- Extremely lightweight and durable
- ASA rating over 26500

MAT 5000 MONITOR
- Can use with Vivi-Tap
- High res. TFT 4"color monitor
- 5" x 5.5" x 2"
- 12V DC Power
- Audio/Video RCA input

FUTURE-VU VIEWFINDER

Emmy Award winner Joe Bauer says: "I have seen the Future, and so should you!"
- All built-in aspect ratio masks
- Use w/35mm, S16, 16mm, anamorphic, video
- 35mm zoom range: 18–200mm

INCREDIBLE PRICING!
Tel: 213.656.7125 Fax: 213.656.6280
P.O. Box 46501, Los Angeles, CA 90046 USA
email: eleshin@aol.com

Monster Mash

grips aboard to operate the crane up and down and side to side while we barreled down the street. We timed this while zooming in and out on the camera to exaggerate the height."

The Shotmaker's center of gravity was repositioned between the axles in order to allow for this kind of movement. The Enlouva was then triangulated off with static lines to prevent it from straying too low or too far to either side. "That was important because we were going about 35 miles per hour down the street, slaloming around other cars and burning wreckage," he says. "We also had the street wet down, so I was pretty worried about either spinning sideways or even catching the camera on something, which would have ripped the arm off. Fortunately, we didn't have any problems."

The key grip also utilized some special bazookas that he'd designed for car rigs while working on the TV series *Viper*. "They were great for working in the cab," Marra says. "They didn't take up any room like a set of sticks or triangulated speed rail would. They're just a vertical posts with leveling heads."

Coming into play during the chase was G's "power breath" — blasts of radioactive halitosis that are both destructive and lethal. "Godzilla doesn't exactly breathe fire," Steiger clarifies, "so it's more of a 'shock-wave' effect. To suggest it visually, we used Ritter fans and several other powerful wind machines. We then added a flickering orange lighting effect and Lightning Strikes units to create this orange storm which suggested the blast's power. We'd then backlight the rain or smoke cool blue and balance it to the power-breath effects, which added contrast and heightened the impact.

"There are floor effects in virtually every shot where Godzilla is even *around* — flame effects, shaking effects, rubble falling, things like that. This went for the lighting as well. We always had Lighting Strikes units or flickering fire effects in the frame to add life. With the Xenon beams, these became our main elements, creating a kind of consistent visual style throughout our shoots in New York, Los Angeles and on stage at Sony. That helps hold the film together visually. We also discussed this with our production designer, Oliver Scholl, and set decorator, Victor Zolfo. They added elements to the set that we could either set on fire or hide something behind. In preproduction, we would pore over Oliver's design renderings and scale models of the sets and look for these things."

"We built a lot of lighting into the sets," Grce says. "We'd put uplights under gratings in the floor, nook lights hidden in various places, fluorescents built into the hallways, and circular lights in the ceiling — all running on dimmer boards so we could add flicker and create different moods. We also had movable glass brick walls which we could roll into position and light through if we needed something from the side."

Steiger adds, "Metallic surfaces, such as brushed aluminum columns, were also helpful. We could move them in to give us a reflection, which enabled us to cast an actor in silhouette," Steiger says. "On any given setup, Jim and I would ask, 'Where do we put the gimmick?' Where could we hide a Lightning Strikes unit? Or a special reflection? Or a fluorescent tube? Our smoke and rain effects helped us in that regard, because they can diffuse things to a point where you can have very bright fixtures right in the frame, creating interesting flares and glows."

Nesting in the Darkness

Built on Sony's Stage 30 (where Esther Williams shot many of her films during the lot's MGM days), the Madison Square Garden set was "largely a cheat," Steiger admits with smile. "The outside oval consisting of the seats and such was

foreshortened, with one side destroyed by Godzilla's tunneling and the other intact. But because they built the set from wall to wall, the question became, 'How do we light it?' This portion of the film is set at night and it's very dark inside, so we went largely with our practicals. We again used a lot of Xenon flashlights, carried by our characters, as well as controlled electrical discharge flashes, and fire effects.

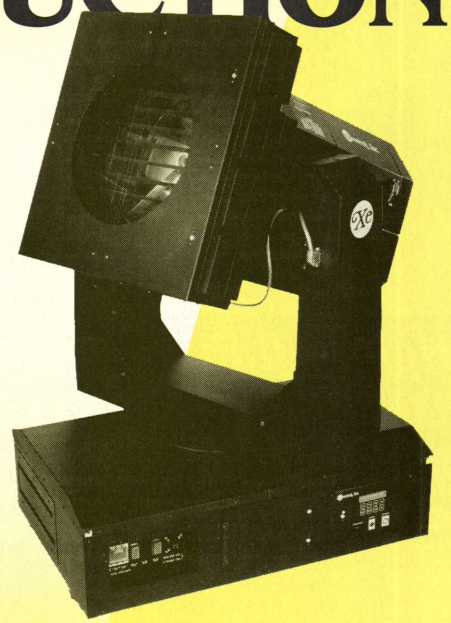
"There was a big portion of the Garden that Anna Foerster and the model crew was going to do with miniatures, but we ended up using the stage much more than was planned because we kept the lighting dark and suggestive. By placing our wreckage properly, using some fire and electrical effects staggered in the distance while concealing things with smoke, we could suggest that the set was much bigger than it really was. That allowed us to do some much wider shots than planned, which made the models less important to that sequence."

Adding to this plan, Grce set up clusters of Par cans coming down from the ceiling to create pools of light and accent specific points. "We didn't have many lamps up there," he says, "and there was virtually no fill except from the bounce we got from the Pars and Xenons." This spotty illumination and the heavy smoke also helped the mechanical effects crew deal with G's relatively small offspring, which were generally back-lit and textured with carefully placed highlights.

"We had basically used the same lighting strategy on the Penn Station cavern set within Stage 27," Steiger relates. "In one setup, we shot it from the remains of a subway platform at one end, looking into this great dark space. At the other end, we placed a single flickering orange lamp and a flame bar, which gives the eye something to focus on and suggests much more than is really there. We never thought we would

POWERFUL PRODUCTION

- Xenon Britelites in 1 K to 10 K units
- Rugged design operates anywhere
- Fixed or fully programmable-utilities standard DMX protocol
- Durable, waterproof, all weather design



POWERFUL PROMOTION

- Sky-Trackers create a "special event" atmosphere
- Billion candle power
- Gets your business noticed
- Show packages and long-term rentals available

Xenotech®
"THE SOURCE For Xenon Searchlights"

STRONG INTERNATIONAL®

1006 Savage Court • Longwood, FL. 32750 • 800-624-3670
300 Fairview Ave. North • Seattle, WA 98109 • 206-749-4077
7348 Bellaire Ave. • North Hollywood, CA 91605 • 800-Xenotech
A division of Ballantyne of Omaha, Inc. • Member-New York Stock Exchange

Film House Service For Every Digital Rental

FLETCHER

See it . . .
Learn it . . .
Prep it . . .
Rent it . . .

High Definition & Digital Betacam

Fletcher Chicago, Inc.

Your Complete Electronic Cinematography House

Every time you rent a High Definition or Digital Betacam package at Fletcher Chicago, you get the same quality service you ordinarily expect from your favorite film rental house. Our meticulous prep, our unsurpassed service and our attention to detail ensure everything goes right on your shoot. You get it all at Fletcher Chicago — new looks, new mediums and new technologies with old fashioned film house service.

800-635-3824
www.fletch.com

NEW Porta-Brace
BACKPACK

The Backpack

■ The NEW BACKPACK is designed especially for the video and audio industry. It provides a light-weight, exceptionally strong carrier for all the accessories that are needed for field production work.

It has a rigid interior frame and can be carried on the back, on the shoulder, or by the top leather handle. It has an adjustable shelf with vertical partition. The entire front of the pack may be opened or it can be opened at the top or bottom for access to specific items. Backpack straps stow away. There are plenty of storage pockets.

porta brace

K & H Products, Ltd.
North Bennington
Box 246
Vermont 05257, USA

PHONE 802-442-8171

FAX 802-442-9118

Monster Mash

shoot the tunnel set from that angle. We had originally intended to only shoot from where we placed the flame bar, but the illusion worked."

Add Grce, "For budgetary reasons, the tunnel set hadn't even been built the way it was supposed to be. It was scaled down and only finished to a certain extent on the far side and the walls. But Tony Marra and his crew blacked all of that out and we just sketched the rest in, primarily with fire lighting effects as our key and Xenon beams adding some detail. That one flame bar at the end was the only real fire. In fact, we used very little real fire on the show."

Grce notes that effective faux flames were done with lamps fronted with a double layer of Rosco golden amber gel and running on either Magic Gadget flicker generators or programs created by dimmer board operator Dave Slodki.

To create a toplight above the subway platform, a 6' x 10' softbox was suspended directly over the actors. This fixture was gelled with CTB, while twin 4' x 4' boxes of flickering orange were hung on either side, slightly in front. A lone fluorescent tube crackled behind them in the twisted wreckage. "We had also rigged up some Dinos with heavy diffusion to create a backlight on them," Grce says, "but we switched them off in the end. The smoke picked up so much light that it was just too bright; instead of seeing a black void, we had this white mass. Knowing when to turn certain lamps off is half of lighting." ("Even if you went to great expense and had to fight with the unit production manager to get them!" Steiger jokes.)

Marra observes, "The subway platform was literally 55' in the air, and there was no room up there for any kind of cranes or scaffolding for a camera platform. The solution was to do a lot of Steadicam work up there; down in the cavern, we placed the technocrane on one 6' by 6'

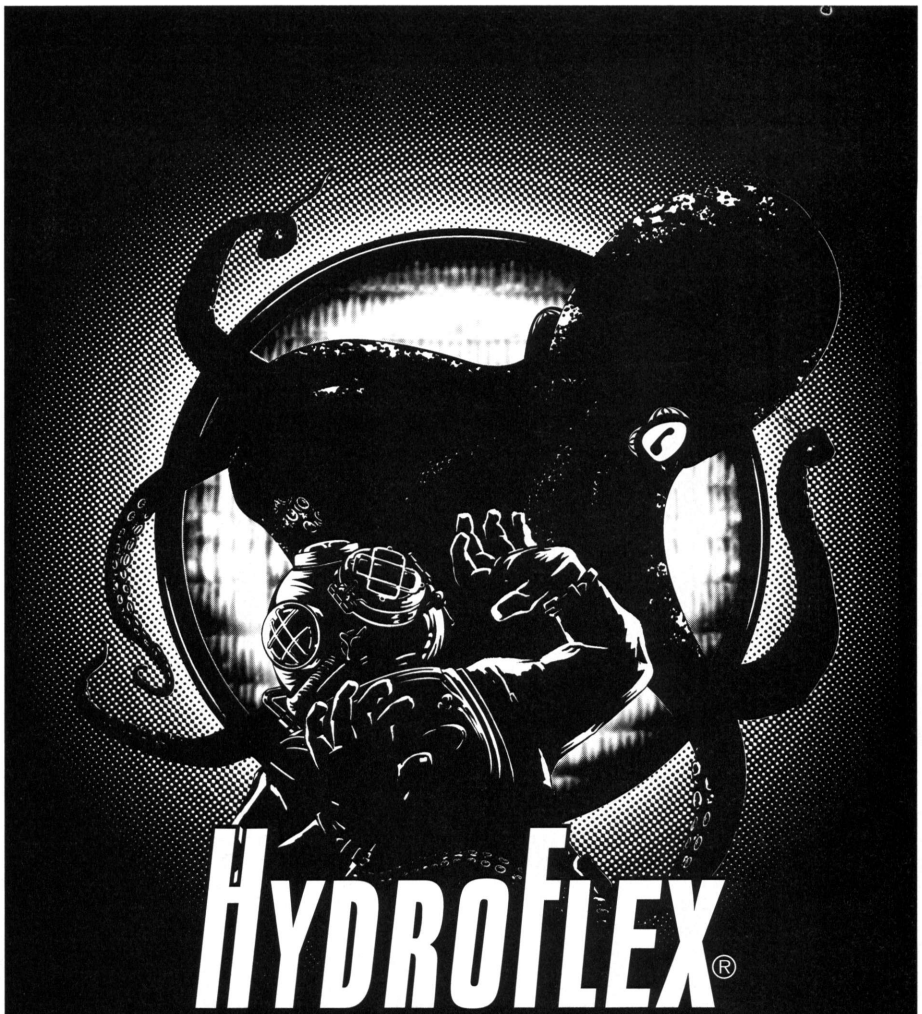
square area and used the telescoping arm to get a lot of moving shots without laying track.

"The camera was constantly moving on this show, and we used everything we could think of to keep it moving. On the beach in Hawaii, for instance, we used the Akela crane for a reveal shot that's an important story point. Roland had wanted a walk-and-talk between a military guy and Matthew Broderick as the scientist is being told what's going on. It was a long shot and we used the Akela to start just in front of the two actors as they walked, move 180 degrees around them, establish this destroyed village in front of them, and then rise up 80' into the air to reveal that they had been walking in Godzilla's footprint. We then see that the next footprint is where the village used to be. There's no cut, and it's a great shot."

Marra credits Drinon, rigging key grip Matt Moles, best boy grip Mike Fahey and the rest of his crew with helping the L.A. portion of the show to run smoothly.

After 104 shooting days, *Godzilla* finally wrapped production in the fall of 1997, though the miniature and digital visual effects units continued working through April of 1998. Steiger served as an advisor throughout the post process, which helped to successfully blend his photography with the CG elements and ensure that the digital Godzilla's virtual lighting was true to its sources. "This was perhaps the most fun I've had on a movie," Steiger says with a laugh. "It's strange to be telling all of these stories about the film, because Roland and Dean have been very protective of the script and of what the new Godzilla looks like — but I'm sure it's all on the Internet by now anyway!"

The cinematographer's next project will be the comedy *Bowfinger's Big Thing*, directed by Frank Oz, and starring Steve Martin and Eddie Murphy. ■



HYDROFLEX®

UNDERWATER CAMERA & LIGHTING SYSTEMS

HYDROFLEX WAS THERE

Titanic
Godzilla
Armageddon
The Truman Show
Sphere
City of Angels
Lethal Weapon
Snake Eyes

AGENTS

AFM Lighting	London	011 44 181 752-1425
Cine Video Tech	Miami	305 754 2611
Mr. Lighting	Sydney	011 612 9906 1811
Northern Lights	Vancouver	604 434-4008
PS Production Services	Torronto	416 466-0037
Sammy's Camera	London	011 44 181 578-7887
Sanwa Cine Rental	Tokyo	011 81 3 5210-3322

TEL: 310/301-8187 • FAX: 310/821-9886 • www.hydroflex.com

This Is Your Life

In *The Truman Show,* director Peter Weir and cinematographer Peter Biziou, BSC tell the imaginative tale of a hapless man whose very existence has been turned into a television show.

by Eric Rudolph

Photography by Melinda Sue Gordon and Peter Biziou, BSC

In today's media-saturated world, cohabitating strangers are ceaselessly documented in vivid detail on MTV, continuous video feeds from the bedrooms of young women are available to anyone with Internet access, and an unending stream of people seem willing to reveal sordid aspects of their lives on tabloid television talk shows.

This alarming set of real-life circumstances has inspired accomplished director Peter Weir (*Witness, Dead Poet's Society*) to "broadcast" *The Truman Show,* an endlessly inventive feature film about a man whose entire life, 24 hours a day since birth, has been televised to the world without his knowledge.

The unwitting star of this wildly popular program, Truman Burbank (Jim Carrey), is selected from a group of unwanted children by producer Christof (Ed Harris), a domineering *auteur* who hires actors

Photos courtesy of Paramount Pictures and Matte World Digital.

The image of unassuming television star Truman Burbank (Jim Carrey) is piped out of his bathroom to a huge real-world audience. Weir and Biziou studied the nature of commercials and situation comedies to devise the film's hyper-real, "lit" look.

to portray young Truman's parents, friends, co-workers and, eventually, his wife.

Truman is raised in an island town painstakingly assembled on the world's largest soundstage — an enclosed, county-sized and completely artificial bubble with its own fake sun, sky and weather. Unable to overcome his crippling fear of water (a condition produced during his youth when a boating mishap claims the life of his "father"), Truman is a prisoner of his surroundings, but eventually adjusts to — and even revels in — the town's relentlessly cheery environment. His every move is recorded by 5,000 hidden television cameras which are manipulated from Christof's central control room, located high above it all in a bogus "moon." The effort is all worth it, because *The Truman Show* is a worldwide smash that earns a tremendous fortune for its creators.

However, the oblivious Truman is not completely untouched by reality. As a youth he becomes smitten with Sylvia, a young female "extra" with a forthright manner and strong, unusual good looks. During a stolen nighttime rendezvous at the beach, she begins to tell him the big secret, only to be cut off by her "father," who zooms right up to the shoreline in the family automobile. Stuffing his daughter into the front seat and slamming the car into gear, the man shouts out that the clan is moving to Fiji.

Truman is so haunted by this brush with real-life infatuation, and so uninterested in his bland "Stepford Wife" spouse, Meryl (Laura Linney), that he begins a touching daily ritual: purchasing fashion magazines and using the photographs in them to try to piece together a simulacrum of the absent Sylvia's face, police Identikit-style. When not trying to re-create Sylvia's haunting beauty, Truman unsuccessfully attempts to contact the island of Fiji. He soon begins to discover other chinks in Christof's artificial world, but his attempts at escape are invariably foiled in setpieces reminiscent of the surrealistic Sixties television show *The Prisoner*.

Weir says that he was attracted to this unusual project because of the quality of the screenplay, which was penned by fellow director Andrew Niccol (*Gattaca*). The esteemed Australian filmmaker explains, "I was intrigued by this complete world that Andrew had invented, because I knew that I would be involved in creating everything from the ground up, a world within a world."

To assist in the building of the story's bright, clean fantasyland, Weir chose director of photography Peter Biziou, whose resumé includes such stunningly photographed films as *Richard III, In the Name of the Father* and *Mississippi Burning* (for which he earned an Academy Award for Best Cinematography). "I was taken with the way Peter uses light, his choice of lenses and his overall look," the filmmaker says. "I loved his work with [directors] Alan Parker and Jim Sheridan. He takes chances, yet one

always sees what one needs to see. I also knew that Peter is selective and only takes on films to which he feels he can offer something unique."

Weir further sensed that Biziou "was a man you could talk to, and he had a great interest in light and how it fell in relation to the story. The way the light falls in our images is a major part of a director's storytelling ability, followed only by dialogue. Here was a case where a hell of a lot of the film's story had to be told with the light.

"All of the light in Truman's world is artificial," Weir continues. "We were after a heightened reality, an artificiality, and we needed to devise a way to convey that feeling without it being too disturbing to the audience. If it looked too odd, then the audience might feel that Truman should have caught on to [his situation] sooner. It had to look, at least at the start, like a somewhat regular movie; we have to believe it as much as Truman believes it. Then we can allow it all to come apart." The result of this thinking was Biziou's masterful use of a high-key lighting style which is the polar opposite of film noir, yet somehow achieves a similarly eerie emotional resonance.

Right: The moody, high-tech feel of the moon-based TV control center contrasts sharply with the brightly-lit artificial world of Seahaven. Below: Christof (Ed Harris) plots out Truman's next dramatic moment. Bottom, right: Weir (in hat) plots out his next shot with Biziou.

In searching for the right look, Weir also studied old *Saturday Evening Post* covers by hyper-realist painter Norman Rockwell. He found inspiration in the "idealization" of Rockwell's renderings of an America that had already largely vanished by the time the artist created many of them.

Along with production designer Dennis Gassner (*Waterworld, The Hudsucker Proxy*) Weir and Biziou even researched the field of covert video surveillance. It was determined that while the various lenses and systems used in that field created an effective look, "most of them were too strong and obvious for us," Biziou explains. "Peter wanted us to use the simplest methods to imply surveillance, so that he would be free to be as dramatic as he wished in telling the story."

To suggest the "surveillance" feel, Biziou used "slightly unusual camera angles and positions, and framing foreground elements in a stronger way, which seemed to support the uneasy feeling" that was inherent in the story.

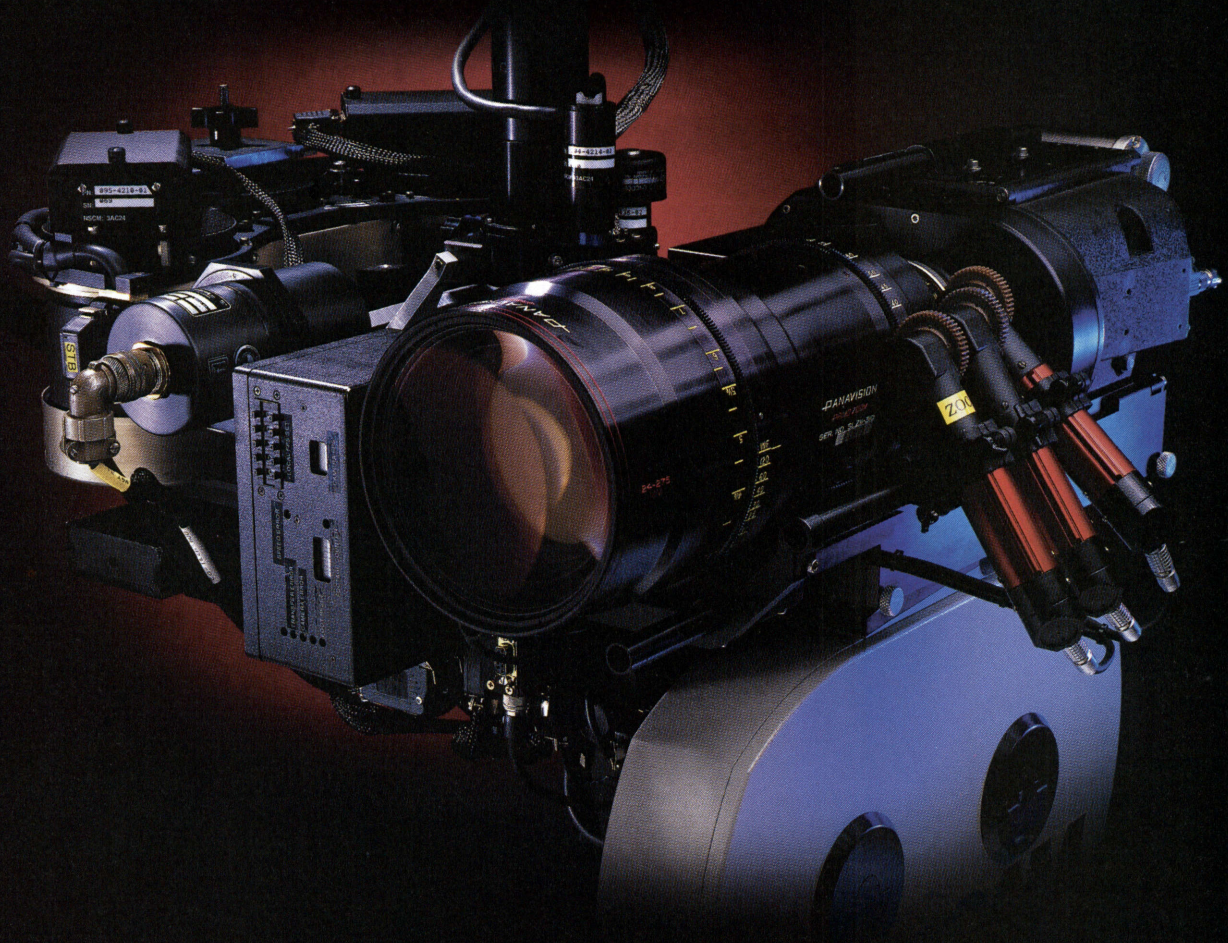
Weir saw *The Truman Show* as a chance to utilize the long-abandoned silent-era cinematic technique of vignetting the edges of the frame to emphasize the center. He used this technique to suggest that the cameras watching Truman were indeed hidden behind or contained within various objects. He offers, "I had become hooked on vignettes, as used by people like D.W. Griffith. I love the technique purely on its own, as a simple but highly effective cinematic device. It was somewhat surprising to me that vignetting hadn't yet been revived."

To create the vignettes, which Biziou says also helped convey "a

INTRODUCING THE

WESCAM F118

WHERE QUALITY MEETS INNOVATION



The same dependability and stability characteristic of WESCAM, only re-engineered for better performance, efficiency and adaptability. New features were added specifically to expand the cinematographer's creativity and quicken overall film production.

- Increased lens adaptability, including the Panavision Primo 11:1 for unmatched zoom capabilities
- More precise steering for easier maneuverability and operation
- Higher speed gyros
- Quicker lens and magazine changes take half the time
- New Cinema Products motor controller and lens drives
- Fewer components
- Quick release dome and window system
- Flexible magazine compatibility

The Newest Wescam 35mm Gyrostabilized Film System.

A SMARTER PIECE OF EQUIPMENT.

WESCAM

ROCK SOLID ▲ WORLDWIDE

www.wescam.com

For technical information, pricing and scheduling, call 818-785-9282 (USA West), 1-800-458-3417 (USA East/NY), or 905-689-2875 (Canada).

This Is Your Life

more obvious, menacing feel," the cinematographer used a variety of gobos placed in front of the lens. Some of the effect was also added or enhanced digitally by postproduction supervisor Mike McAllister, whom Biziou credits with "doing a great deal to subtly enhance the look of the film."

Naturally, the overall look of *The Truman Show* was influenced by television images, particularly commercials. Weir offers, "We took a lot from the current vogue for extreme wide-angle lenses in commercials, where characters often lean into the lens with their eyeballs wide open. And we borrowed our high-key, somewhat glossy lighting approach from commercials and situation comedies. We often used a lot more light in interiors than one would normally use, to keep it all sparkly and clean. We were always reminding ourselves that in this world, everything was for sale." The director specifically refers to the story's winking conceit that the fictional *Truman Show* series is supported entirely by advertising revenue generated by in-your-face product placements staged by Truman's friends and associates.

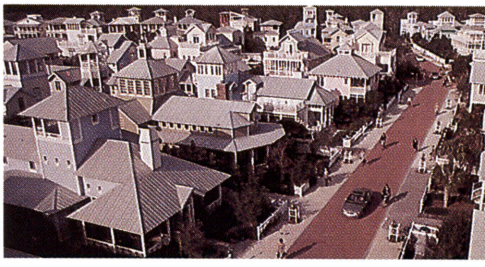
Other influences also shaped the look of the film. Weir notes, "We began to adopt a combination of imaging styles from the bold graphic framing of television commercials to the more obvious, somewhat menacing feeling of surveillance, using static, long-held angles. We combined these with the predictable visual routine of TV soap operas." Subtlety ruled the day, however: "The public is so aware of what is going on with TV that we only had to infer these various feelings."

While interiors showing Truman's domestic life were filmed in a way that was "a little too well-lit and sort of glossy," Biziou didn't want the lighting to be overly brash. Seeking to retain some of the filmic quality that is expected in features, the cameraman says that he modified the television-style lighting by sculpting it with "a lot of black flagging and drapes, to control the soft light and keep it from being too flat."

Truman's world was created by the filmmakers in the real-life municipality of Seaside, Florida, a "planned community" created by developers on 78 acres of beachfront property on the Gulf Coast. The real town of Seaside (called Seahaven in the film) was designed so it would maintain a distinctly Rockwell-esque look, recalling small-town, pre-suburban America. (According to a report in *The New York Times,* all Seaside homes are required to have a front porch and a white picket fence.)

Needless to say, Seaside was chosen for its slightly unreal, too-perfect look. For Biziou's purposes, however, the town was far from perfect. As he details, "Seaside consists of rows and row of similar houses, all of which were white or pale pastel, and it faces south. That [color scheme], bathed in strong, glistening sunlight all day long, naturally created extremes of contrast and shadows. It was only by putting in a tremendous amount of fill light that we achieved the quality that really suited our needs.

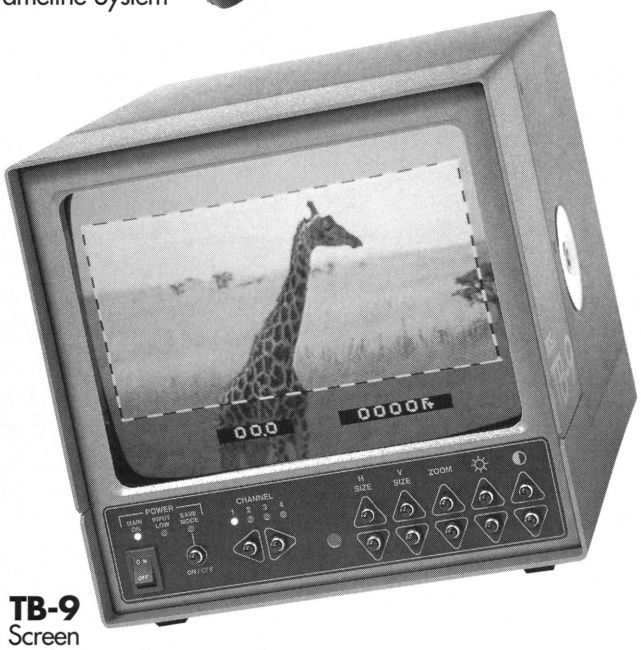
"In adding the fill, we got this lovely bright sunny feel without any craggy harsh shadows anywhere," Biziou elaborates. "It began to take on this very slightly super-real feel, almost looking like a controlled environment, which was exactly what we were after. It is often by accident, perseverance and accepting what



Top, left: Truman imagines himself as a spaceman by drawing on his bathroom mirror with a bar of soap. Since the production shot on five-day weeks, Carrey and Weir utilized the downtime to hone the actor's improvisations. Top, right: The planned community of Seaside, Florida provided a perfect location for the filmmakers. Bottom: Truman's global audience tunes in to witness his daily antics.

DUO
Frameline System

TB-6
16 x 9 Format
Green Screen



TB-9
9" Green Screen

TR-1
VHF/UHF Receiver

Be Smart

See the Growing Line of Products from XCS at the L.A. ShowBiz Expo.

June 12-14 Booth #820

Xtended Camera Support, Inc.
Phone/FAX: 612.578.8876
http://www.xcsinc.com

©1998, Xtended Camera Support, Inc. All rights reserved. All specifications and prices subject to change without notice.

This Is Your Life

Bay Area-based Matte World Digital provided extensive CG architectural extensions to the Seahaven sets, adding scope to the artificial world.

you've been given that you do things you never quite expected.

"This huge amount of fill also gave us very good apertures — f8 or f11 on daylight exteriors — and the depth and sharpness added to the hyper-realistic feel."

Producing such an abundance of bright daylight fill was a major technical undertaking. "We used enormous 40'-square scrim reflectors and diffusers, several of them at a time, which could be moved into place quickly via cherry pickers," Biziou recounts. "We would aim several 12Ks at or through these scrims, which would produce volumes of lovely, powerful, soft fill. Combined with the bright blue skies, this look helped imply that there was something unreal going on, but one never knew quite what."

Weir concurs with his cinematographer, noting that the augmented Florida light was as important to the look and feel of the film as the town itself. "When we got a clear day, the sky was a sort of aching blue and the houses were gleaming white," the director recalls. "Waiting for clear, windless days and then pumping in all of this fill slowed us down, but I would remind myself when I was getting impatient that this was being done in order to make everything gleam and look like a commercial.

"I think when Peter took his first look at the town, he gulped hard," Weir adds. "You had to wear sunglasses just to look at the houses. But I am thrilled with his work."

To help cope with the extremes of contrast still evident in the day exterior setups despite the enormous fill lights, Biziou chose to shoot these portions of *The Truman Show* on Eastman Kodak's EXR 5248 stock, which is rated at 64 ASA for daylight with an 85 filter. "We used it for its fine detail and excellent exposure latitude," he says. "It was wonderful for handling the extremes in contrast that we weren't quite able to tame."

For day interiors and car shots, Biziou used Kodak's 200 ASA EXR 5293. "I wanted good aperture and depth," he offers. "For night interiors and exteriors I used the 500 ASA [Vision 500T] 5279, which is a great high-speed stock with surprising sharpness and detail."

Throughout the show, the cinematographer worked closely with Deluxe Laboratories, which "gave us consistently good dailies, for which I was really grateful." However, Biziou did extra work to help ensure that his dailies hit the mark. "In addition to the normal lab reports, I sent Deluxe handwritten notes on each day's run, so the timer would be well-informed," he relates. "They said they found these notes useful, as they normally get no such information and don't have any guidance on how to print. Mike Millican, the timer at Deluxe who finished the film, gave us a wonderfully-timed first print."

In order to keep the images clear and sharp, Biziou avoided lens diffusion and filtration during initial photography. He reveals, however, that "we did ask for a slight warm tone on the final grading before the release print. We found this tone in one of our daily runs and just loved the way it looked."

Biziou's camera system was a new choice for him: Panavision's Platinum Panaflex with Primo lenses, which "hold [strong light] before flaring very well and take contrast very kindly. I tested them extensively because I had never used them before. This film was an ideal place to use the Primos because of the wide contrast ranges we encountered in the bright sun."

Wide-angle lenses were used extensively to both emulate the style of television commercials and to approximate the super-wide look of the extreme lenses used on surveillance cameras. Aspheron elements were sometimes added to the wide lenses to make them even wider and further emphasize the off-kilter feel of life in Seahaven. Long lenses were also used to mimic images created by stationary outdoor surveillance cameras, such as those now so popular with television news operations.

In a town with 5,000 hidden cameras, the devices are bound to show up in some unusual places, and Biziou credits his crew with bringing that concept to life. "Our key grip, Chris Centrella, is one of the most imaginative I've ever worked with," the cinematographer attests. "He would put cameras in the most

"The best cameras deserve the most advanced lenses"

We have them.

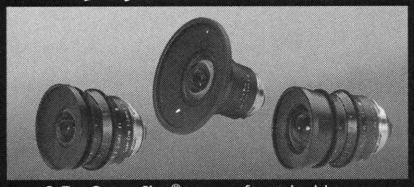
20X

OpTex/Canon 20 x 10.5 zoom lens

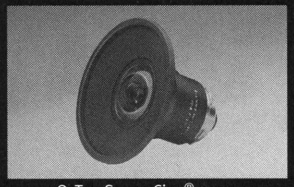
9X

OpTex/Canon 9 x 7 zoom lens

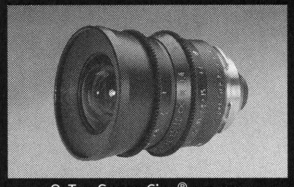
Simply the most comprehensive range of Super 16 lenses available



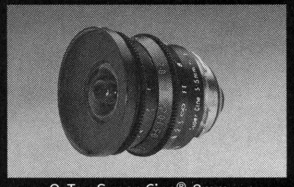
OpTex Super Cine® range of matched lenses



OpTex Super Cine® 4mm



OpTex Super Cine® 5.5mm



OpTex Super Cine® 8mm

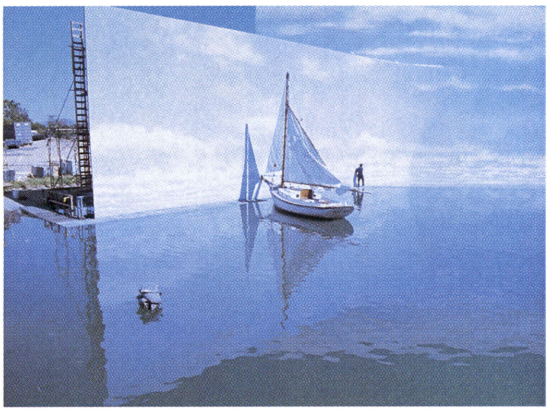
When you want to produce high quality images you need the best lenses. OpTex has the best selection, from zooms to wide angles and telephotos

Improve your image, contact ZGC on **(973) 335 4460,** fax **(973) 335 4560** e-mail **www.zgc.com**
or for international sales call OpTex direct on **+44 (0) 181 441 2199**, fax **+44 (0) 181 449 3646**
e-mail **info@optexint.com** or read more on **www.optexint.com/optex/**

See it, try it, buy it from OpTex... **FIRST**

OpTex®
Working to improve your image

This Is Your Life



As Truman attempts to sail out of Seahaven, Christof hits him with a synthetic tempest. The sequence was shot at Universal Studios (right), utilizing wind machines and dump tanks. After the storm subsides, Truman drifts into the edge of his universe — a huge sky backing. Matte World Digital again came into play and reworked the production footage (top) into the finished shot (above).

extraordinary places on short notice. If suddenly we wanted to put a camera in the revolving doors of Truman's office building, Chris would have that ready for us while we were shooting another scene. He was always ahead, always asking bright questions and on his tip-toes all the time, but with a smile!"

Biziou notes that Centrella played a hand in creating one of the more amusing and unexpected shots in the film, in which Truman is seen driving his car from a very unusual perspective. The cinematographer explains, "We were using a car that had been stripped of the dashboard and engine to allow us flexibility in camera placement, so we got a wide-angle lens right in there where the dashboard radio would have been, and added a masking gobo in front of the lens. Mike McAllister later composited in some little liquid-crystal digital numbers to reveal that we were in fact looking at Truman from the *inside* of his car radio."

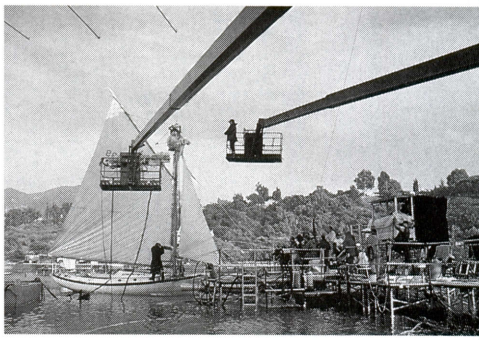
This scene, like all of the driving shots, was lit with bright diffused light. Biziou reports, "We went to the extra effort of balancing the light levels in the car interiors to the outside so that we would have the same exposure level for both, to get the look of a controlled environment, and the depth of field to heighten it."

The lenses used for the car interiors were some of the widest on the show, including 12mm, 14mm, 17mm and 21mm units. Biziou reports that these extreme optics were occasionally pushed even further with the addition of diopters, which allowed the lenses to be placed even closer to the subject than normal to "add to the uneasy feeling we were after."

While Seahaven has the look of an normal, albeit idealized town (occasionally recalling the idyllic suburbs depicted in such television shows as *The Brady Bunch*), its complete artifice leads to some odd occurrences in the film. One hilarious example is an early scene in which an HMI lamp falls from the sky and crashes to the ground next to Truman, prompting him to search the heavens in utter confusion. Adding to the gag is the fact that the lamp is labeled "SIRIUS" — denoting it as *Alpha Canis Majoris*, the Dog Star, and the brightest in the sky after the sun. Biziou recalls, "It was in the script that some object fell from the sky, and the question of just what it should be was going around the set. Peter Weir took great pleasure in asking people what they thought the object should be, and then took great pleasure in deciding that it should be a movie light. We did two shots the lamp falling, but Peter later decided he wanted a high, aerial view, which Mike McAllister put together on the computer using a high-angle shot of the town."

Another combination of in-camera and digital work occurs during a frantic nighttime search for Truman after he somehow eludes the ubiquitous cameras and disappears. Christof tells his staff to bring up the sun, even though it is still nighttime by the show's internal clock. Reports Biziou, "We actually brought up the sun — *physically*. Our key grip and the chief electrician mounted about 300 Par 36 bulbs into three large banks mounted on a tube frame on a crane hoist. We then jerked these lights up 60' in the air in about four seconds."

The dramatic lighting plan was heightened by the use of a false horizon. Biziou continues, "We had an enormous black flag stretched between two cherry pickers just in front of the lights when we popped

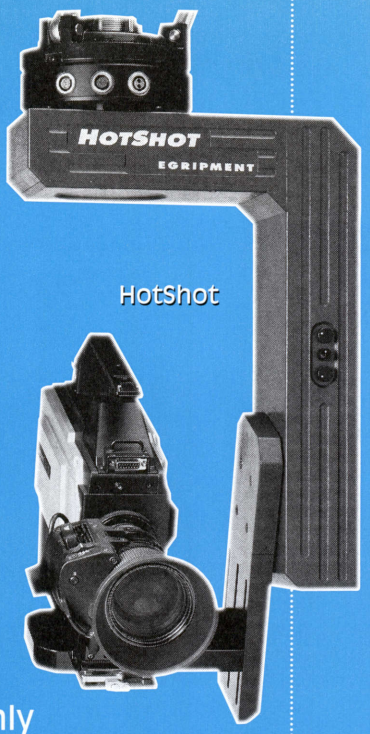


them into the air. The shadows of the people and the trees shortened quickly, and the horizon line washed across the buildings. It was quite an effect, and it worked well in combination with Mike McAllister's amazing impressionistic digital sunrise."

While the God's-eye view of the HMI dropping from the sky and the shot of the rapidly rising sun are overt uses of special effects, Biziou believes that many of the film's other postproduction enhancements will sneak past almost everyone. "Mike McAllister digitally added a little fill and diffusion in the last seconds of the shots depicting the effects of the rapid sunrise, just to help the fake sunlight look more like daylight," the cameraman begins. "But a lot of the other digital elements look photographic as well. At times, the weather would change and we'd lose

EGRIPMENT

"THE STANDARD WHICH SUPPORTS THE MOST CREATIVE AND INNOVATIVE MINDS IN THE FILM AND TELEVISION INDUSTRIES".



HotShot

EGRIPMENT is the most experienced manufacturer of Remote Camera Heads in the world. We offer a complete line of Remote Heads and Controls as well as a full line of Camera Support Equipment including Ridable and Remote Cranes, Dolly's, and a variety of accessories.

EGRIPMENT has manufactured only the highest quality products for over 25 years and continues to expand our already extensive line. For all of your Camera Support needs, EGRIPMENT has always been there to help you "get that shot."

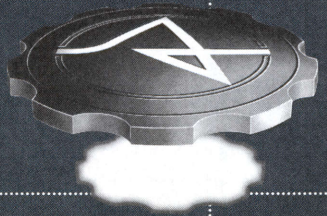
HotHead

MiniShot

MicroShot

Egripment B.V.
Machineweg 22, 1394 AV Nederhorst den Berg, Holland.
Telephone: +31(294)-253 988. Fax: +31(294)-254 658.
E-mail: egripment@egripment.nl

Egripment U.S.A. INC.
7625 Hayvenhurst Avenue, Unit 27, Van Nuys, CA 91406
Telephone: (818) 787-4295 Fax: (818) 787-6195
E-mail: egripment@egripment.com



True Digital Design...
SPECTRA PROFESSIONAL IV-A
Most accurate meter ever built
Direct Reading – No Reference Chart Needed!
Accept no imitations

Incident and Reflected light meter

Measures:
- **f/stop**
- **footcandles**
- **lux**
- **contrast ratio**
- **f/stop difference**
- **average**
- **digital, analog backlit display.**

Spectra light meters are the industry standard and the choice of professionals for more than 50 yrs. Spectra products have received Five Technical Achievement Awards from the Academy Of Motion Picture Arts and Sciences.

Contact us for a list of stocking dealers.

SPECTRA CINE, INC.

Professionals choice for light measurement
820 No. Hollywood Way, Burbank, CA 91505
Phone: (818) 954-9222 Fax: (818) 954-0016
e-mail: info@spectracine.com
website: www.spectracine.com

DP's Dialogue No. 2

Spray less wax on chrome with TRUE-POL™.

Shooting bright metal presents you with glare and reflections that can wreck a scene. Until now, there was little you could do about it, except gunk it up with noxious, smelly, dulling spray, hope for the best, and settle for that phony dull-metal look.

TRUE-POL to the rescue!

TRUE-POL Filters are 12-times better than the polarizers you have been using. Now you can shoot right at shiny surfaces and capture more color saturation, more density, *and* visual reality. That translates into more great takes, less wasted time, and more raves at dailies.

And, the cast and crew will thank you for not subjecting them to dulling spray fumes.

Schneider lenses and B+W Filters are world renowned for superior optical quality, so it's not surprising that TRUE-POL Filters provide an effectiveness (technically called Extinction Ratio) measuring over ER 374. Compare that to your present polarizing filter, which is approximately ER 31, and you'll switch to TRUE-POL.

For specs and more information contact
Schneider Optics Inc.
285 Oser Avenue
Hauppauge, NY 11788 USA
TEL: 516 761-5000
FAX: 516 761-5090
email:info@schneideroptics.com
http://www.schneideroptics.com

B+W FILTER
Schneider KREUZNACH

©1997 Schneider Optics Inc.

This Is Your Life

Motivated by the use of hidden cameras, unusual angles are utilized throughout the picture. Here, Truman and longtime friend Marlon (Noah Emmerich) are caught by a vending-machine cam.

the intense blue skies we felt were so important. Mike would put them back digitally. I love it when digital work is subtle and is used without doing bangs and crashes and explosions." Additional extensive "invisible" effects work was added by Matte World Digital, including the creation of Seahaven's false topography, the extension of various buildings exteriors, and the addiction of scope to the surrounding artificial sea and sky (see photos).

The ruse of Truman's life in Seahaven, of course, eventually fails. When our hero finally realizes that something is terribly wrong and that he is unable to leave the town by any land routes, he confronts his aversion to the water by heading out to sea on a sailboat. Biziou recalls, "[After finishing in Florida,] we rushed back to Los Angeles and set up at the Universal Studios tank, where Peter Chesney had built special water dumps, wave-makers and hydraulic lifts so we could put the boat on its side or turn it completely over."

All of the sailing action takes place over a short period of time in the story, so Biziou needed to have consistent lighting throughout the two-week tank shoot. Toward this end, he explains, "Chris Centrella built a 100' by 60' diffusion scrim and got the largest mobile crane possible, which could go 250' up. Chris would literally boom this flag over the tank to keep Truman's boat in shadow. As the sun moved from east to west, he would move the flag so we always stayed in shadow. It was a real bonus which gave us immediate lighting consistency."

However, Biziou cautions that this bold approach was not without considerable risks. "Chris had to compute and work out his stresses and strains and really know what he was dealing with, because any wind over 15 miles an hour could have tipped the crane over. You could lift an airplane with that kind of span. Fortunately, we had no such problems.

"The big scrim gave me the soft light of an overcast day, so I then armed in a Musco from the background to add a strong backlight source to all of the various waterworks, such as the rain and waves. Water spurts just have no life without some backlight. The diffused sunlight and the Musco backlight comprised the only lighting we used in the scene."

In an attempt to get the water-shy Truman to turn the boat back toward shore, Christof orders up some nasty weather, escalating the tumult as the undaunted star soldiers forward. Finally, horrendous hurricane-force winds are dialed up from the *Truman Show* control room. To create the tempest, Biziou explains, "we had two jet engines on trucks, as is common these days, which screamed across the water and just took the tops of the waves off and gave them a nice cresting. These engines are extremely noisy and smelly, but I'd recommend them any time; they're wonderful machines. It was a joy to see a proper thrusting wind. That, coupled with the blasting of fire hoses into the jet engine stream, which would just get energetically strewn across the whole scene, gave us some wonderful storm footage."

The defiant Truman eventually ties himself to the boat's mast, willing to die in his attempt to discover what is beyond the manmade confines of Seahaven. Picking up on that classical element, Weir notes, "The story of *The Truman Show* is not new; it is a love story about a man trying to reach freedom and find the truth.

"What is new is the state that we find ourselves in during the late 20th Century. With the colonization of the airwaves, with empires being formed by satellites beaming programs down and by the Internet, there are now more people with enormous power and influence in our lives — people who are not elected to these positions. And while they're not necessarily malevolent people, we know how power corrupts. It will be interesting to see how people respond to a story that deals with someone who is misusing that power, someone who is not in the guise of a conventional villain." ■

The Phoenix Crane System

Exclusive U.S. distributor
MovieTech USA, Inc.
www.movietechusa.com

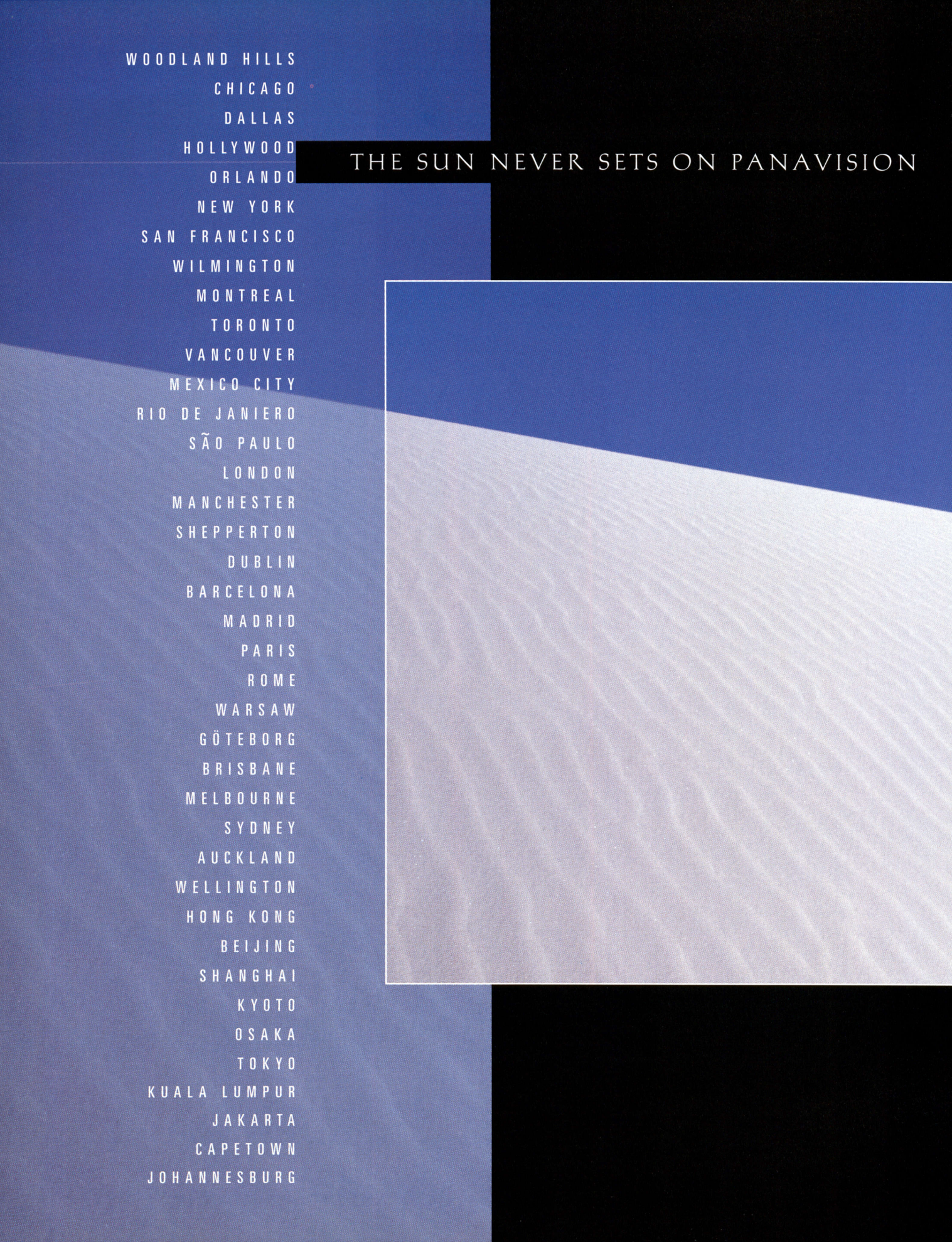
* *also see*
The Magnum Dolly, Felix Crane, and Master Track Systems

Sales & Rental
Phone: (305) 949-9251
Fax: (305) 919-7703

Come visit us at
Showbiz Expo West
Booth # 1368
and see
John Leeward
about our
Lease/Purchase Options
Show Specials available
Manufactured by MovieTech GMBH

K 5600 *LIGHTING* **KITS**

JOKER-BUG-LITES
10434 Burbank Blvd. , North Hollywood, CA 91601
Tel: (818) 762.5756 • Fax: (818) 762.6629 • **(800) 662-5756** • www.K5600.com


WOODLAND HILLS
CHICAGO
DALLAS
HOLLYWOOD
ORLANDO
NEW YORK
SAN FRANCISCO
WILMINGTON
MONTREAL
TORONTO
VANCOUVER
MEXICO CITY
RIO DE JANIERO
SÃO PAULO
LONDON
MANCHESTER
SHEPPERTON
DUBLIN
BARCELONA
MADRID
PARIS
ROME
WARSAW
GÖTEBORG
BRISBANE
MELBOURNE
SYDNEY
AUCKLAND
WELLINGTON
HONG KONG
BEIJING
SHANGHAI
KYOTO
OSAKA
TOKYO
KUALA LUMPUR
JAKARTA
CAPETOWN
JOHANNESBURG
THE SUN NEVER SETS ON PANAVISION

PANAVISION®

Six of the world's finest cinematographers receive salutes from the ASC and the Academy of Motion Picture Arts and Sciences.

True Luminaries

Text by
Stephanie Argy,
Chris Pizzello,
Stephen Pizzello,
Eric Rudolph and
David E. Williams

Moving images have always had the ability to instill an audience with a sense of awe. During cinema's nascent phase at the turn of the century, viewers were left dumbstruck by the simplest of scenes: a pretty actress waving at the camera, or a horse galloping in a field. Over the ensuing decades, of course, theater patrons have become considerably more discerning and sophisticated — not to mention jaded. In this modern era of sensory overload, populated by cinephiles who seem to believe they've seen it all, it is the truly gifted filmmaker who can leave an indelible imprint on the collective memory of a movie-mad populace.

This year's group of nominated cinematographers have accomplished that feat with considerable panache. Indeed, 1997 proved to be a year of exceptional images. Certainly, none of us will forget *Titanic*'s scenes of doomed lovers clinging to the great ship as it sinks (expertly rendered by ASC and Academy Award winner Russell Carpenter, ASC); *Amistad*'s horrifying God's-eye view of African slaves being chained together and thrown from a schooner to a watery grave (Janusz Kaminski, ASC); *Kundun*'s dreamlike vision of the 14th Dalai Lama standing amid the bodies of thousands of dead monks (Roger Deakins, ASC, BSC); the scenic use of Venice as an elegant backdrop for a callous scheme hatched by duplicitous lovers in *The Wings of the Dove* (Eduardo Serra, AFC); *The Boxer*'s opening shot of a lone pugilist punching away the final moments of his 14-year sentence in a cold blue prison yard, framed by the institution's stolid steel bars (Chris Menges, BSC); or *L.A. Confidential*'s masterful rendering of classic noir moments, including a climactic shootout in which shafts of light pierce through a wall that's been punctured by a hail of bullets (Dante Spinotti, ASC, AIC).

In the following pages, *AC* offers its annual tribute to a group of cinematographers whose considerable skills brought honor to the big screen. Four of these artists (Carpenter, Spinotti, Deakins and Kaminski) have already been the subject of comprehensive feature articles which are excerpted in this roundup (and can be referenced in back issues or on the ASC web site at www.cinematographer.com). We have therefore allotted extra space to the work of both Chris Menges and Eduardo Serra as we tip our hats to all of the nominees.

— Stephen Pizzello

ASC & Academy Award Nominees

Russell Carpenter, ASC
Titanic *

Roger Deakins, ASC, BSC
Kundun

Janusz Kaminski, ASC
Amistad

Chris Menges, BSC
The Boxer

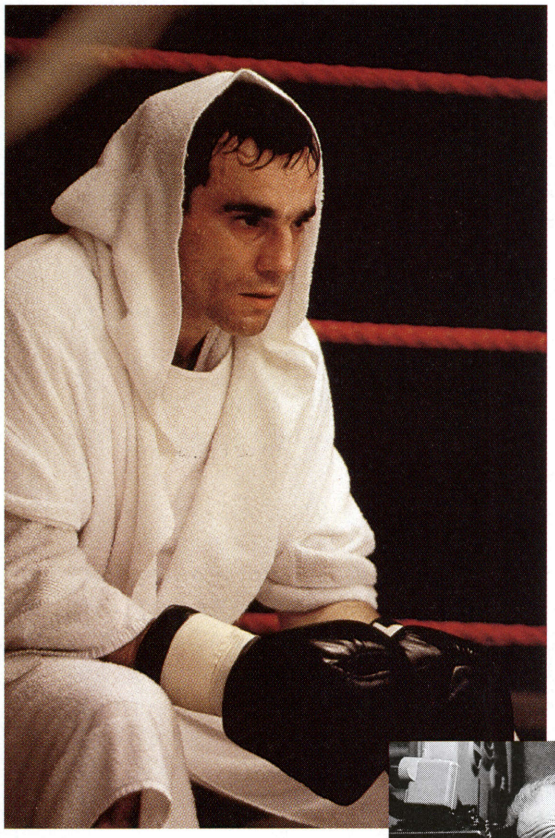
Eduardo Serra, AFC
The Wings of the Dove

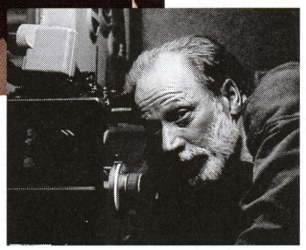
Dante Spinotti, ASC, AIC
L. A. Confidential

* Denotes winner.

Chris Menges, BSC
The Boxer

In light of April's landmark peace pact between British and Irish factions in historically strife-torn Northern Ireland, writer-director Jim Sheridan's 1997 film *The Boxer* seems uncannily prescient. The story is played out against a modern-day backdrop of two opposing factions within the controversial Irish Republican Army: one urging continued armed struggle against pro-





British and Protestant forces, the other seeking a peaceful resolution. When boxer Danny Boy Flynn (Daniel Day-Lewis) is released from jail following a 14-year stay in prison for an unspecified IRA-related crime, he brings meaning and purpose back to his life by climbing back into the ring and rediscovering his lost love, Maggie (Emily Watson). In turn, the West Belfast community Flynn returns to is inspired by a man who has turned his life around by choosing to fight only within the rules.

Sheridan called on the two-time Academy Award-winning British cinematographer Chris Menges, ASC, BSC (*The Killing Fields, The Mission*) to serve as director of photography on *The Boxer.* Ironically, Menges had just completed filming on director Neil Jordan's own IRA-themed film, the historical epic *Michael Collins* (see *AC* Oct. '96), which also earned him an Oscar nomination. The veteran cinematographer, who has directed four films (including *A World Apart, Second Best* and the upcoming release *The Lost Son*), once again found himself shooting on location in Dublin, Ireland, which doubled for British-controlled Belfast in *The Boxer.*

When asked to compare his approaches to the back-to-back IRA-themed films, Menges offers, "*Michael Collins* had an enormous history behind it. The clothes, the people, the time and the man's life immediately conjured up a graphic image of how the film should look. We were dealing with early 1900s carbon lights in the streets of Dublin, so there was a definite period image that I was inspired to capture. *The Boxer* was shot from the perspective of standing back and catching the story in a documentary style. The look of the film developed organically, but the two words Jim did stress before we started were 'freedom' and 'reality.'

"In documentaries, you tend to stand back with an 50mm or 80mm lens, so that you're less obtrusive while shooting and the microphone can float in close. There's a chance that you will be at least ignored, if not forgotten. Then you have a chance to catch 'the moment,' or something special, which is the biggest reward if you're perceptive with a handheld camera. On *The Boxer*, we shot a lot of scenes with two Moviecam Compact cameras with long lenses, running simultaneously to lend added fluency to the performances. It's a different kind of storytelling. I think if that style is used skillfully in a feature, it does liberate the actors. *The Boxer* is a totally performance-driven story, and a work of passion."

Menges bathed the Northern Ireland scenes in *The Boxer* in cool, blue tones, a bold approach inspired by the color philosophies of Vittorio Storaro, ASC, AIC (see further details in this issue's coverage of *Bulworth,* beginning on page 40). "I remember talking to Vittorio about light," Menges says. "He would talk about [the psychology of] the rich [colors], the warmth, the sun, the heat of Italy. When you're in Northern Ireland, there are days of great clarity, but also days of pollution, gloom and clouds. Northern Ireland has that 'blue' quality. We've been shooting in Arizona for *The Lost Son,* and the colors are so vibrant and different. When you're in Northern Ireland, very often there are rain clouds and a different kind of feel. As a cinematographer, you're always trying to capture the true sense of light that exists in certain places."

In rendering the real look of Northern Ireland for *The Boxer,* Menges used almost no filtration on his Zeiss lenses, and shot predominantly on Eastman Kodak's 500 ASA 5298 film (save for a few bright daylight scenes shot on 5248). "I would always try to make very simple decisions about the light and the camera," he comments. "This was a film about listening to the words. [For the Northern Ireland day exteriors], I would usually just use the

In *The Boxer,* Daniel Day Lewis stars as an ex-convict who attempts to cut off his old ties with the Irish Republican Army. Cinematographer Chris Menges infused the film with cool blue tones to capture both the mood of the story and the true sense of light that exists in Northern Ireland.

Photos by Frank Connor, courtesy of Universal Studios.

Introducing **UltiMate**

The Ultimate Director's Finder
FOR 35MM MOTION PICTURES

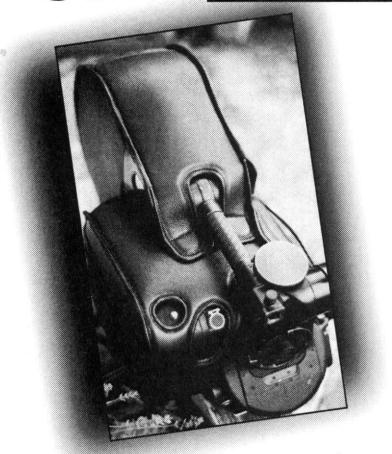
UltiMate is a handheld or tripod-mounted director's finder that features interchangeable lens mountings, multiple camera-type/format-type ground glasses, an optional 2X anamorphic desqueezer, and more. Interchangeable ground glasses accommodate a variety of shooting formats (including Super-35), and camera types.

Take a look through **UltiMate**. With its ergonomic, comfortable, adjustable handle, you won't want to be on the set or on location without one.

KISH OPTICS

4653 Lankershim Boulevard, Suite A North Hollywood, CA 91602
818-506-5800 Office / 818-506-5856 Fax

CINEASST



World's best Camera Glove
Protect Your Key Investment

- Higest quality form fitted leather
- Heater pockets
- Optional company logo
- Rain covers also available

www.cineasst.com
email: info@cineasst.com
T.(416) 975-2565 F.(416) 975-0895

True Luminaries

available light with reflectors, unless it was just too gloomy or dull."

Menges extended his less-is-more, documentary-style approach even to somewhat dark interiors, such as the warm, inviting pub where many of the story's tight-knit West Belfast community residents go to unwind. "I used almost all practical lights in the pub, because the main goal was the freedom of the camera," Menges says. "[Production designer] Brian Morris gave us the atmosphere of a real pub designed in the 1950s, and we added the set onto the flats we were shooting in. The practicals were little lampshades on a wall and tungsten lights above the bar. If there was trouble on a particular shot, I would sneak lights into a corner, but they would be nothing fierce — maybe 500-watt tungsten quartz bulbs going off reflectors or [through] tracing paper."

The narrative of *The Boxer* is framed around three key boxing matches, which are all given a distinct visual look by Menges. The filmmakers dedicated much thought to methods of freeing the camera within the claustrophobic confines of the boxing ring. "In preparing for the boxing scenes, we certainly watched many fine films, such as Martin Scorsese's *Raging Bull*, which I studied hard and diligently," Menges says. "In the end, we suspended a woven rubber bungee cord about 26' above the boxing ring. Imagine a pendulum in the middle of the boxing ring: on the bottom of this woven rubber fabric, we placed a flat bar upon which we mounted the camera. Then we ran all of the camera's controls — the iris, the focus, the video — as well as a cable that adjusted the tilt of the small video monitor that was mounted beside the camera. All of these cables ran up to the ceiling and across to a balcony, where the focus puller had his control, an assistant adjusting the iris was on another and a person tilting the television monitor manned a third. Operator Mike Proudfoot or I would operate the bungee cord. It made for a very free camera that could float all the way around the ring without restrictions. It was a great sensation — and it made Jim laugh."

Menges again favored the cool, bluish end of the color spectrum for the film's first boxing match, set inside an old, fluorescent-lit boxing gym that Flynn has renovated after being released from prison. Before the match, however, parents of children killed in "the troubles" are acknowledged from the ring, and Menges decided to create an appropriate contrast by accenting the parents with warmer, more amber tones. "We did a lot of research to try to get the look of Belfast as accurate as possible, so we visited several gyms and looked at lots of pictures," he says. "We lit the boxing ring with eight 6'-long, flicker-free fluorescent tubes suspended on wires from the ceiling. Those tubes were quite cold in color. For the audience members, we used 500-watt Pars in black steel industrial lampshades, which shone straight tungsten light on them — probably at 2800° Kelvin."

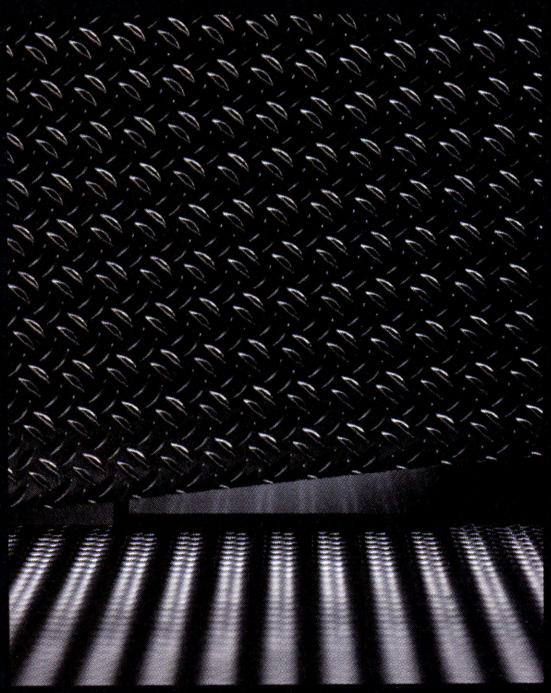
"*The Boxer* was shot from the perspective of standing back and catching the story in a documentary style. The look of the film developed organically, but the two words Jim [Sheridan] did stress before we started were 'freedom' and 'reality.'"
— Chris Menges, BSC

The emotional stakes are raised higher for Flynn's second boxing match, which takes place in the center of a teeming, capacity West Belfast audience. "We shot in a

the launch

showbiz LA 12 - 14 june 1998

stand **1664**



to be revealed next month

THE IMAGE OF CHOICE

FORMATT FILTERS

UNIT 23 ABERAMAN PARK INDUSTRIAL ESTATE ABERAMAN ABERDARE MID GLAMORGAN CF44 6DA UNITED KINGDOM
TEL **+ 44 (0)1685 870979** FAX **+ 44 (0)1685 877007** E-MAIL **formatt@compuserve.com** WEBSITE **www.formatt.co.uk**

a part of VFG PLC

Vancouver Film School

Full-time Programs

Film Production

Vancouver Film School's intensive, hands-on portfolio production program is recognized throughout the world as "the filmmakers' boot camp." The emphasis of this program is to create well-rounded filmmakers though the production of high quality students films. VFS film students complete more production in one year than most 4 year programs offered in North America.

Acting for Film & Television

For people with a strong desire to perform before the camera, Vancouver Film School offers novice, intermediate and professional actors an opportunity to study with actors who are also trained, experienced educators, committed to delivering the highest quality on-camera training available anywhere.

Multimedia Production

Imagine... a fully-digital campus with millions of dollars of software, where every computer is networked with high-speed, fibre optic access to the Internet, where the doors are open 24 hours a day. Learn... CD-ROM production, HTML high-end web page creation, digital video / digital audio production, MIDI, computer animation, graphics, text, and the business of multimedia.

VFS: Designated Avid Training Center / Designated Protools Training Center / Designated Digidesign Training Center / Certified Macromedia Training Center / Certified Alias Training Center / Certified Softimage Training Center.

*If you are **serious** about your education and a high-paying career, **you owe it to yourself** to find out more about the one-year, full-time portfolio production programs offered at Vancouver Film School: Film Production, Acting for Film & Television, Multimedia Production, Classical Animation, 3D Animation & Digital Effects, Advanced Digital Video Production, Alias 3D Special Effects, Avid Training, DVD Training.*

Call. Compare. Nothing does. **Call: 1-800-661-4101**

VANCOUVER FILM SCHOOL

E-mail: query10@multimedia.edu

Web: http://www.multimedia.edu

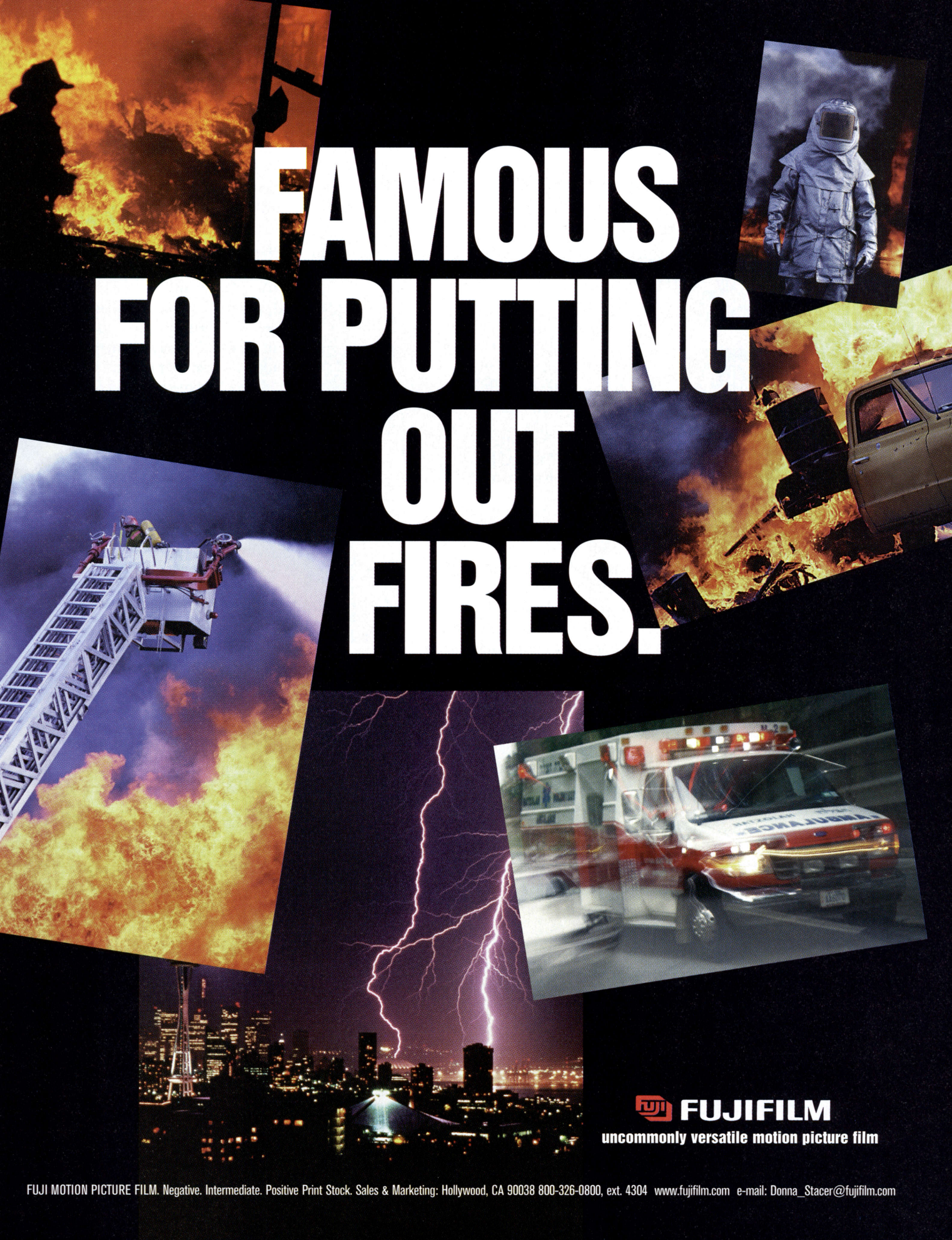
Vancouver Film School
#400 – 1168 Hamilton Street,
Vancouver, BC CANADA V6B 2S2

True Luminaries

huge Dublin church hall with a very high ceiling, where the light responded in a very different manner," Menges recalls. "Also, our use of the light was different. For instance, there was blue light coming in the windows, and it was almost dark high up in the auditorium. We used 6K HMIs outside the windows, and I used a system of tungsten bulbs eight feet above the ring. The light on the audience was reflected from the center of the ring. That gave the camera maximum freedom, since it meant that there were very few lighting fixtures around the room. We were free to film in a verité style. If you surround the action with lamps and light stands, you'll never be able to 'capture the moment.' The light from the center of the ring glowed upward into the people in the [staggered] seating tiers.

"The lights above the ring were controlled by dimmers, which I used throughout the shoot. The other tool I used throughout the boxing scenes was the diaphragm of the camera. I was operating the camera for the second boxing match, so I had one of my assistants pulling stop from about T8 in the middle of the ring to T3 on the edges of the ring. But for the other two matches, when I wasn't operating I would control the aperture all the time on a radio."

The penultimate match in *The Boxer* was filmed within a vast soundstage at Ardmore Studios near Dublin. The space was dressed to re-create the ballroom of London's historic Grosvenor House Hotel. The cold, stark look of the previous two matches is replaced by the warm, stuffy atmosphere of the London hotel, which is populated by well-fed, blasé patrons in full evening dress. Menges explains, "There were twelve 500-watt tungsten bulbs in steel stage-light boxes on each of the four corners of the ring, which ran the whole length of the sides of the room. The bulbs were slightly warm



FUJI MOTION PICTURE FILM. Negative. Intermediate. Positive Print Stock. Sales & Marketing: Hollywood, CA 90038 800-326-0800, ext. 4304 www.fujifilm.com e-mail: Donna_Stacer@fujifilm.com

True Luminaries

Eduardo Serra exploited the scenic waterways of Venice, as well as various London locations, to achieve a lush look for the period drama *The Wings of the Dove*. The director of photography used coral filters to lend the Venice scenes a warm and earthy ambience, and opted for natural light sources as often as possible.

and produced a yellowy glow which was quite reminiscent of what you would see in the real hotel. They're very powerful lights, so they gave us an amazing T5.6 aperture at 500 ASA. The idea of the scene was to make the light hot. We shot with the suspended camera on the bungee cord from the ceiling, but we also worked handheld and with a Steadicam and a regular dolly. There were always three cameras running simultaneously for the boxing scenes, unless we were using the 'bungee camera.'

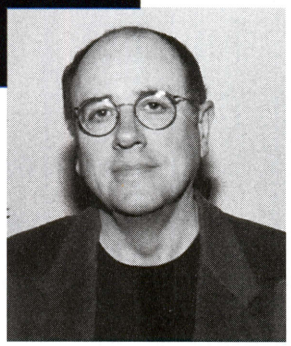
"To light the audience, we basically used the practicals on the tables around the room, as well as a few 10Ks and 5Ks. Plus, there were chandeliers, mirrors and lights suspended from the walls — Brian Morris built a very fine duplicate of the original Grosvenor House Hotel, and the crew really helped me out. I have to say, I had great Irish crews on both *The Boxer* and *Michael Collins*."

Menges attributes the film's timeliness to director Sheridan's tenacity and his willingness to abruptly alter his script according to the then-shifting political situation in Northern Ireland. "Jim is an incredibly demanding director," he admits. "He gets images in his mind as fast as lightning, and you have to run to catch up. The script was still being written as we shot it, because the political situation in Northern Ireland was changing rapidly. We had to shoot new scenes as the politics changed, because Jim was trying to make a film that honestly had meaning in understanding [the current political situation] in Ireland. We're never going to solve the problem until we first at least understand it, which is why *The Boxer* was an important film to work on. Like *Michael Collins*, it was an Irish film that I, being from Britain, am really proud to have worked on."

—Chris Pizzello

Eduardo Serra, AFC
The Wings of the Dove

In *The Wings of the Dove*, cinematographer Eduardo Serra presents a vision of life in 1910, contrasting staid London with glowing, sensuous Venice. The movie tells the story of a manipulative young woman (Helena Bonham Carter) who tries to pair her own lover (Linus Roache) with a dying American heiress (Alison Elliott), so that they can inherit her fortune.



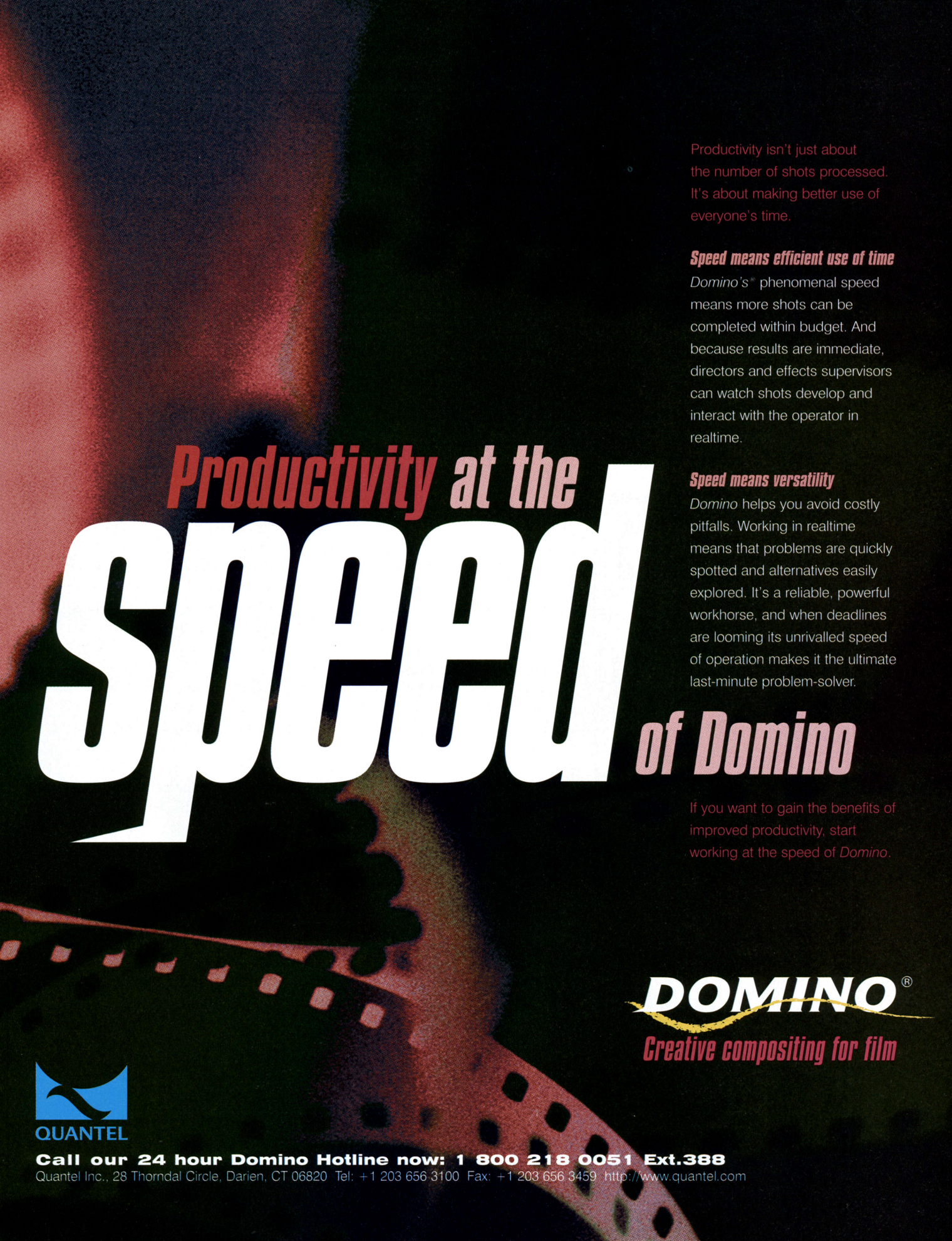
Serra, along with director Iain Softley, production designer John Beard and costume designer Sandy Powell, settled on very different color palates for the picture's two locations: London was characterized by blue, and Venice by warm golds. "We had a very complete discussion before we started shooting about these kinds of ideas, about what London would represent, what Venice would represent," says Serra, who has also served as cinematographer on such films as *Jude* (1996), *Funny Bones* (1995), *Map of the Human Heart* (1992) and the upcoming *What Dreams May Come*. "We would discuss pictorial references, and then I submitted color and lighting representations. Once the director approved all of this construction, we had an agreement on what to do, which I absolutely respected."

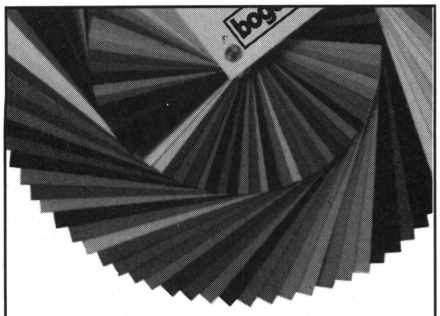
Serra estimates that filming took 10 or 11 weeks. The crew spent a little more than half the shoot in London, where roughly 20 percent of the work was done on stage.

The production's major set was the subway train and station that appear at the beginning of the movie. "There was no way of getting a practical, very old station in London," says Serra. For the sequence, he worked out the lighting with the production designer and art director. "We were assuming [that the period] was just after we had the electrical lamp," he says. As a result, the art department was able to incorporate most of the illumination into the set as practicals. "We really built it together," says Serra.

To augment the built-in lights during close-ups in the station scene, he kept extra lights on hand. "I

Photo by Mark Tillie, courtesy of Miramax Films. Portrait by Merrett Smith, courtesy of Eastman Kodak Company.


Productivity at the
speed
of Domino
Productivity isn't just about the number of shots processed. It's about making better use of everyone's time.
Speed means efficient use of time
Domino's® phenomenal speed means more shots can be completed within budget. And because results are immediate, directors and effects supervisors can watch shots develop and interact with the operator in realtime.
Speed means versatility
Domino helps you avoid costly pitfalls. Working in realtime means that problems are quickly spotted and alternatives easily explored. It's a reliable, powerful workhorse, and when deadlines are looming its unrivalled speed of operation makes it the ultimate last-minute problem-solver.
If you want to gain the benefits of improved productivity, start working at the speed of Domino.
DOMINO®
Creative compositing for film
QUANTEL
Call our 24 hour Domino Hotline now: 1 800 218 0051 Ext.388
Quantel Inc., 28 Thorndal Circle, Darien, CT 06820 Tel: +1 203 656 3100 Fax: +1 203 656 3459 http://www.quantel.com



A COLOR FILTER AD IN BLACK & WHITE?
Colors so vivid, they would be impossible to reproduce in a color ad.

•

BOGEN PROFESSIONAL LIGHTING FILTERS
Color Stable
High Heat Tolerance
Lower Cost

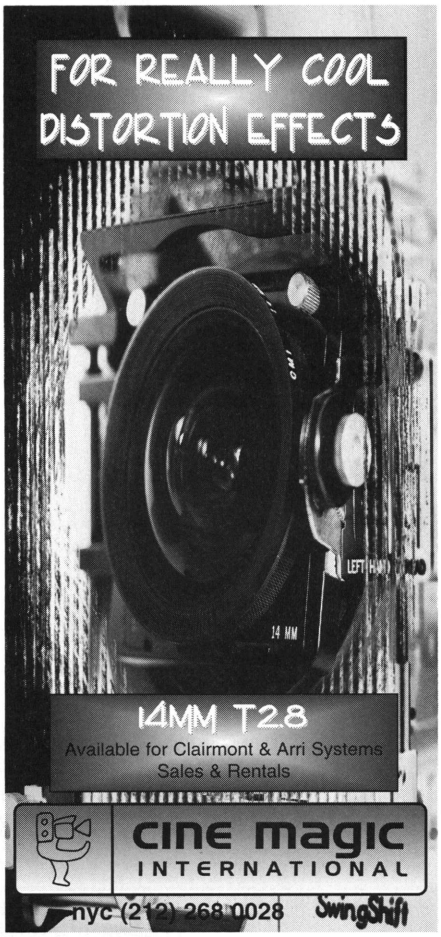
•

Available in
21" x 24" Sheets 48" x 25' Rolls
12" x 12" Filter Packs

SEE OUR TRUE COLORS
Send for our Free Filter Swatch Book

bogen cine

565 East Crescent Avenue, Ramsey, N.J. 07446-0506
(201) 236-0077



True Luminaries

always have some Kino Flos when we get close," he says. "I've been a fan of fluorescent light for 10 years, even before there were Kino Flos."

Serra first used fluorescents in 1983, for *The Hairdresser's Husband.* At the time, he remembers, he had to import his lights from the United States, because he couldn't find satisfactory fluorescent tubes in France. Over the last 15 years, though, fluorescent lights have improved dramatically, according to Serra. Starting about a decade ago, he says, good fluorescent tubes have been able to give a color rendition better than that of an HMI.

In keeping with the agreed-upon color scheme, the art direction and production design in London leaned toward blue hues, which Serra enhanced with his filtration, usually using an 81 EF filter, or sometimes no filtration at all.

In Venice, by contrast, he shot everything with coral filters to create an earthier feel and a Third World look. "[Those scenes were] warm, soft, almost African," says Serra. He opted as much as possible for natural and period light sources, such as flames and torches, supplemented with Kino Flos.

At one point in the story, the characters go to an evening carnival in Venice. The sequence was one of the most elaborate in the movie, lasting over 15 minutes and involving hundreds of extras. "I didn't really want to use artificial lights in that situation," says Serra. "Apart from the torches and sources in shot, I used fire bars — gas bars — as a fill light. On very wide shots, I had to put some soft light — Kino Flos — in the background. On anything that is tight, my key light was a fire bar, and my fill light was another fire bar."

Working successfully with a fire bar, he says, is a matter of getting the proper-size pipe. Distance also has an effect on controlling the light. "If you are not very far away [10 to 20'], it's controllable. Further away it becomes more difficult."

Some delicate locations in Venice demanded special care. "You have to absolutely protect the surroundings," says Serra, who turned to 5' helium balloons with HK tungsten lights for some interiors. "Of course they are useful outdoors," he says. "But using helium balloons inside is really wonderful — they're like big Chinese lanterns." In one scene late in the movie, Elliott and Roache visit a church in Venice, where they climb a scaffolding until they are high up in the building. "I just had one balloon from the ground," explains Serra. "When we changed the angle, we would just change the rope holding the balloon."

He often chose to go very tight with his lenses, because of the nature of the script. "The main thing was the drama," he says. "Of course we were more on the longish side, to favor the dramatic relations between people. We had to be close to the characters, because it's an actors' film."

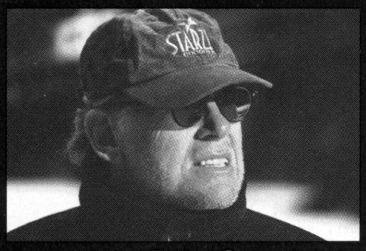
Serra's dim, period lighting prompted him to use an Arriflex 535 so that he could avail himself of fast Zeiss lenses. "I really needed the extra speed," he says, especially for the night sequences in Venice.

Although he has shot both anamorphic and Super 35 widescreen movies, Serra chose to photograph *The Wings of the Dove* in Super 35, again because of the low-light situations that he created. "Some situations require Super 35," he says. "When you have night carnival scenes lit only with torches, standard lenses perform better. Less glass also means fewer problems with flares."

Speed was also a factor in his choice of film. "The stock was Fuji 500 [Super F-500 8571], my favorite stock," he says. "For the kind of work I usually do, Fuji is better. Women look prettier on Fuji." He chose the 500 ASA emulsion because he finds it a bit softer. Also, he says, modern film

CAMERA CONTROL

featuring Milo



Eric Saarinen
Director/Cameraman
Winner of 3 Clios
Ad week Director of the Year

"I really don't want to give the Milo a recommendation, because it's such a great system I always want it available for me."

"For the real-world elements we shot with the Milo hooked up to a car rig. Programming the moves was remarkably easy. I loved the way I could just hold out my hand and say 'I want the move to go from here to here'. We shot 49 passes and never had a hiccup. For such a complicated shot the process was very fast. All the passes, shot at live action and much longer exposures, matched perfectly."

"Once we went into post the move data read easily into CGI. The way it fed into the digital world was just flawless. I defy anyone who looks at the spot to say what was digital and what was real since it all went together so well. There's no blending or blurring. I really cannot say enough."

"Orbit" is the new Toyota Landcruiser commercial produced by Plum Productions in Santa Monica for Saatchi & Saatchi using a combination of real and CGI elements.

The commercial starts by moving across a mountainous landscape. The camera then pulls back to reveal whole continents. Finally one realizes that this particular planet is mapped to the contours of the 98 Toyota Landcruiser.

Camera Control
3317 Ocean Park Blvd.
Santa Monica, CA 90405
PHONE 310 581 8343
Fax 310 581 8340
www.cameracontrol.com

motion control live action miniatures

trovato Jib arms

SMOOTH, RUGGED, RELIABLE,
....EXQUISITELY DESIGNED

QUATTRO
Starting at $3,950

TOTE JIB
Starting at $1,295

CAM JIB
Starting at $850

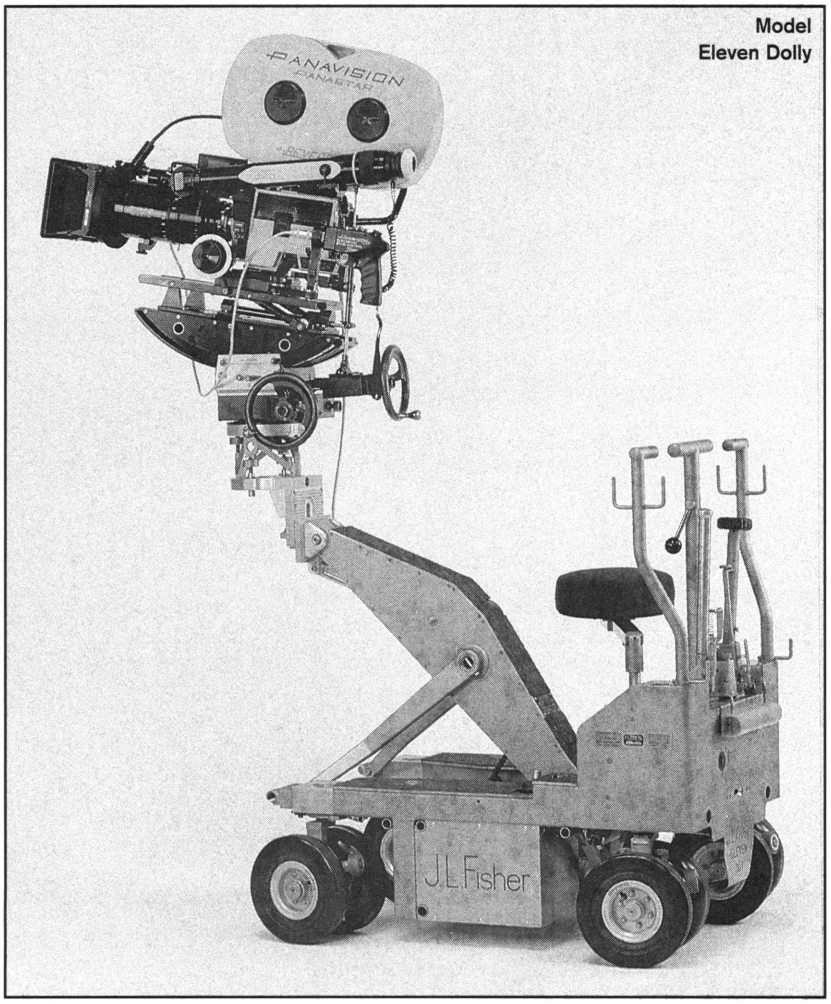
Excellence...
RECOGNIZED AROUND THE WORLD!

SEE OUR ON-LINE CATALOG
www.trovatocine.com

Call:
(716) 244-3310

TROVATO MFG., INC. • ROCHESTER, NY

J.L. Fisher, Inc.
Motion Picture and Television Equipment



For a Complete Product Catalog or Leasing Information, contact us at:

10918 BURBANK BLVD. • NORTH HOLLYWOOD CA 91601
(213) 877-9966 • (818) 769-2631 • FAX (818) 769-2341

True Luminaries

stocks have become so refined that grain is hardly noticeable, even with stocks fast enough to use in very low-light situations.

In postproduction, Serra took steps to further enhance the differences between the two cities, such as treating sequences involving Venice with a bleach-bypass process. "There are many kinds of [silver-rentention processes] with many different names," he says, explaining that he used the technique for two main reasons. First, when shooting wide open, as in the carnival sequences, he wanted to ensure that he would have very good blacks. But he also wanted to maintain the warmth of the scenes. "I used the bleach-bypass process to keep it a little more close to earth," he adds.

A beach-bypass process is one of the most personalized services a lab can provide, with as many variations as there are cinematographers. Like many Europeans, Serra prefers to do the process on an interpositive. "I don't like to do it on the prints, as Technicolor does," he says. When the bleach-bypass process is done on the print, it means the whole movie has to be processed that way. Doing the process on the interpositive, on the other hand, allows the cinematographer to use it just on selected sequences. "It's very common, very easy, and allows you to choose which scenes you want to have," Serra says.

He says that not only is the process not appropriate for every scene, but the expense of doing it on an entire film makes it so costly that producers are often unwilling to pay the price for each print. Serra believes that it's better for the process to appear in only a few selected scenes, rather than to have it in every scene but on only a few release prints.

Though *The Wings of the Dove* seems like the antithesis of an effects film, extensive postproduction work was done to correct a problem that occurred during filming. "Every time we needed rain, we had bright sunshine," explains Serra. "There is a

TITANIC

PARAMOUNT PICTURES

and

TWENTIETH CENTURY FOX

PROUDLY

CONGRATULATE

RUSSELL CARPENTER, A.S.C.

American Society of Cinematographers Award
Outstanding Achievement in Cinematography

and

Academy Award®
Best Achievement in Cinematography

TM Twentieth Century Fox. Copyright © 1998 by Paramount Pictures and Twentieth Century Fox. All Rights Reserved.

lot of digital postproduction, changing skies and making them stormy. But we went for a kind of stormy look where you have some sunlight. It has an unusual look."

Overall, Serra says, the cooperation among the department heads on *The Wings of the Dove* built a sense of cohesion that made the project succeed aesthetically. The cinematographer reserves special praise for costume designer Powell (who was also nominated for an Oscar) and production designer Beard for providing him with beautiful material to photograph. "I think I was very lucky with the visuals," he says. "They did such wonderful work that it helped me a lot."

—Stephanie Argy

Russell Carpenter, ASC
Titanic
ASC and Academy Award Winner

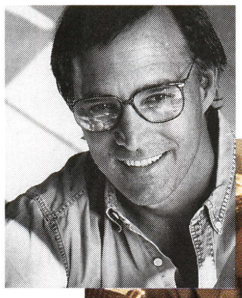
Russell Carpenter swept the ASC and Academy Awards for Best Cinematography with his stunning work on *Titanic*, directed by James Cameron (see extensive coverage in *AC* Dec. 1997). The duo had previously collaborated on *True Lies* (*AC* Sept. '94) and the 70mm 3-D production *Terminator 2 3-D* (*AC* Aug. '96). The cinematographer's other credits include *The Lawnmower Man* (*AC* April '92), *Hard Target* (*AC* Sept. '93), *The Indian in the Cupboard* (*AC* Aug. '95), and the comedy *Money Talks* (on which he shared credit with Robert Primes, ASC). He recently finished shooting *The Negotiator*, which stars Kevin Spacey.

After Caleb Deschanel, ASC completed photography on the modern-day segments of *Titanic* in Nova Scotia, Carpenter joined the production at the Fox Studios Baja complex in Rosarito, Mexico, where all of the period and ship sequences would be shot. Despite having less than three weeks to prepare for this exceptionally complex production, the cameraman decided that his previous experiences with Cameron, as well as the strong professional bonds he'd developed with his camera team, would help him fill the gaps. "If a crew works with a director of photography for any length of time, they're going to know what his favorite solutions are for any given problem," Carpenter reasons. "Also, most importantly, most of the people I brought to the shoot had worked with Jim before, so they knew the kinds of physical and spiritual demands that would be made on them. I wasn't going to bring any untested people into that situation."

Aided by camera operator Jimmy Muro, Cameron applied his trademark kinetic, decidedly modern visual style to *Titanic*'s predominately Edwardian-era milieu. "I think Jim got around that really well," Carpenter offers. "There are actually two very different photographic styles within the period section. In the first part, the camerawork is rather polite, graceful and even eloquent. I was trying to reinforce the opulence and beauty of the time with the lighting." Later in the film, as the ship begins to sink, the filmmakers pull out all the stops to generate maximum tension and suspense.

Carpenter cites *Howard's End*, *Heaven's Gate* and *The Natural* as influences on his lighting approach on *Titanic*. He adds, "Early on, there were decisions about what would be 'allowed' in regard to the period palette, but there really *aren't* any set rules about what kind of lighting is or is not appropriate for a period film. *Titanic* bears the stamp of Jim Cameron's very blue night lighting, but there's also a lot of amber in this picture, which is quite a departure. With the warmer tones, we sometimes added a bit of a sepia feeling to some of the light, without resorting to using antique suede, coral or tobacco gels. Of course, you see more color in the scenes in the first-class section of the ship, if only in the costumes. That's a natural effect which is dictated by the story."

Carpenter concludes, "As enormous and logistically challenging as this film was, I feel happiest with the more intimate scenes. This was a great opportunity to show some work that is more delicate than the action-oriented films I've done in the past. I'll remember *Titanic* as a



Photos by Merie W. Wallace, courtesy of Paramount Pictures and 20th Century Fox.

For the romantic epic *Titanic*, Russell Carpenter achieved a fine balance between two very different photographic styles: sumptuous period opulence and heart-pounding suspense. He says that he was grateful to have the opportunity to "show some work that is more delicate than the action-oriented films I've done in the past."

LIGHTSTORM
ENTERTAINMENT

proudly congratulates

RUSSELL CARPENTER

on his

ASC AWARD

for

TITANIC

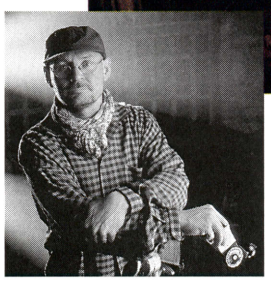
True Luminaries

challenge and a testament to Jim's visionary gifts and drive, but perhaps more importantly, I'll recall that I was supported through it all by a group of talented and committed crew members. That's the bottom line for me."

— David E. Williams

Janusz Kaminski, ASC
Amistad

Janusz Kaminski has collaborated with director Steven Spielberg on four motion pictures: *Schindler's List* (see *AC* Jan. 1994), which earned the cinematographer both an Academy Award and an ASC Award nomination; *The Lost World* (*AC* June '97), an adrenalized sequel to *Jurassic Park; Amistad* (see full coverage in *AC* Jan. '98), for which the cameraman received both Academy and ASC Award nominations; and the upcoming *Saving Private Ryan,* a World War II epic centering on the D-Day invasion at Normandy (to be covered in *AC*'s upcoming August issue). However, his diverse resumé also includes *Jerry Maguire, How to Make an American Quilt* (*AC* Dec. '95), *The Adventures of Huck Finn, Tall Tale* and *Little Giants.*



A strong indictment of slavery set in America's Colonial era, *Amistad* presented Janusz Kaminski with the opportunity to craft impressive visual images which reflected the story's harsh realities while avoiding the clichés of the historical genre. Kaminski augmented the picture's look by combining Technicolor's ENR process with a careful application of flashing and smoke.

In assessing Kaminski's ability to handle a wide range of photographic challenges, Spielberg has noted, "As a cinematographer, Janusz is not 'one size fits all' — he's much more of a chameleon. He takes the stories he does very seriously, and he marks up the scripts. He tells a cinematography story on top of the writer's or director's story, and he designs the photography according to the beats and measures of the narrative. Because of that, he's going to shoot differently on *Jerry Maguire* than he would on *The Lost World.* Over the course of his career, Janusz has put together a collection of amazing and completely different looks from picture to picture."

With *Amistad,* Kaminski's set out to simulate the Colonial era of American history, and he succeeded in spectacular fashion. The results are all the more impressive given the rigorous demands of the production. The entire film had to be shot in a mere 48 days, and some of the story's "day exteriors" — scenes that take place at a Goya-esque prison — were actually shot within a Universal Pictures soundstage. Further complicating matters were the picture's seabound scenes, some of which were shot on the Pacific Ocean and some of which were simulated with boat mockups on the backlot.

To keep up with Spielberg's rapid pace, Kaminski and his crew devised a series of preconceived lighting looks that could be deployed quickly and efficiently. They relied most heavily upon the "Seven-Minute Drill," which consisted of various sizes of muslin bounce fronted with a half Soft Frost diffusion frame. By aiming Fay lights or other units into the frame, the filmmakers could get a soft, pleasing and directionalized light source.

The cinematographer carefully enhanced the look of the film by using Technicolor's ENR process in combination with flashing and a judicious use of smoke. "I flashed this film because I did comparison tests for certain things — with flashing and without it," Kaminski told *AC.* "I found that the ENR becomes very slick and elegant if you don't flash it. It's very beautiful, but if you flash 10 or 15 percent it becomes grittier, which was the look I wanted for the story. [After reading the script,] I immediately knew that the story required photography that was not too pretty. I didn't want to fall into the clichés of the historical genre. The movie is about a slave rebellion in 1830, so it would have been wrong to apply lighting that conveyed romantic notions. It's a very harsh and emotional story: these people were kidnapped; packed like cattle into a slave ship, where they spent many days before being intercepted by a Navy ship; and then sent off to a really dungeon-like prison. They were suffering from cold and starvation, and I felt that the lighting should support that storyline."

—Stephen Pizzello

Roger Deakins, ASC, BSC
Kundun

Martin Scorsese's *Kundun* is a film that truly immerses viewers in another culture. A lyrical ode to the life of the 14th Dalai Lama, the picture weaves a dreamlike spell with

Photos by Andrew Copper, courtesy of DreamWorks SKG.

on the edge of the millennium

some things are still made by hand

Introducing the Panaflex Millennium—Panavision's new studio sync-sound camera which encompasses many new features. The Millennium continues our tradition as the industry leader in the advancement of motion picture cameras and lenses. Motivated by input from our customers, Panavision's products are the result of a team effort to create sophisticated, innovative, extraordinary tools which at their most basic level are handmade. Our reward comes from knowing that the images captured will transport filmgoers well into the next millennium.

PANAVISION®

True Luminaries

the help of painterly photography by renowned cinematographer Roger Deakins. "I think this film is very much a poem rather than a traditional narrative film," Deakins told *AC* in a comprehensive article that appeared in our February 1997 issue. "It's more of a mood piece involving a specific time and place in history, so our main challenge was to capture that feeling."

The project was a marked departure from the types of films many expect from Scorsese, whose oeuvre has often explored the violent impulses of mobsters, sociopaths and other troubled souls. The director knew that he would need a cinematographer with a fine aesthetic sensibility, and was duly impressed with Deakins, whose previous work included *The Shawshank Redemption* (which earned him both an ASC Award and an Academy Award nomination — see *AC* June '95), the ASC-and Academy-nominated *Fargo* (*AC* June '97), *The Hudsucker Proxy* (*AC* April '94), *Dead Man Walking, Courage Under Fire, Mountains of the Moon* and *Pascali's Island.*

In bringing the Dalai Lama's story of personal struggle to life, Scorsese insisted upon authenticity. Determined to lend the intimate film an emotional resonance, the director and producer Barbara De Fina cast the film with native Tibetans, none of whom were professional actors. They also took the production on location to Morocco, where Deakins worked with Italian production/costume designer Dante Ferretti to craft painstakingly meticulous Tibetan tableaux. A good portion of the shoot was completed at the Atlas Film Studio in Ouarzazate, a makeshift facility that was upgraded to house the film's intricately detailed sets. Deakins says that initially, "The studio 'entrance' consisted of a mud wall with this door in the middle, and when you went through, there was one small 'stage' — really just a warehouse — surrounded by an expanse of desert. It was really surreal."

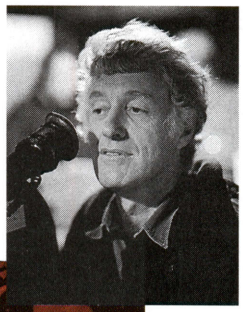
Once the Atlas Studio's extensive facelift was completed, Deakins installed lighting platforms and pre-rigged his major sets with an array of fixtures ordered from Cartocci in Rome. He had initially planned to leapfrog his lights from one set to another, but modified his strategy to accommodate a schedule which to some extent reflected the chronology of the script. "I didn't want to be fussing with the lights while the actors were there preparing for a scene," he explains. "On most of the sets, there were minimal lighting changes from shot to shot, because I pre-lit the sets using the platforms that had been prepped beforehand."

Deakins sought to lend the story a naturalistic look through the use of practical sources such as butter lamps. "In general, I like to make a light source look as if it's really working, instead of overpowering it with an artificial source," he says. "I do use gag lights, but I like the sources themselves to be very bright within the scene."

For exterior shots, the cinematographer notes, "We basically shot with very hot light. I suppose we made an advantage of the fact that we were shooting in the midday sun; every day was hot and bright. We really didn't shoot anything in the morning or evening; I think low, golden sunlight tends to be a bit overused. We used the bright exterior light as a nice contrast to the interiors of these monasteries, which were naturally very dark.

"Working on this show reminded me of some of the documentaries I've worked on," concludes Deakins, whose work on *Kundun* also earned him awards for Best Cinematography from the New York Film Critics Circle and the Boston Society of Film Critics. "It was a bit like camping: we just had to make sure we took everything we were going to need! We had a complicated schedule, difficult sets, and a remote location. But in the end, I'm very pleased with what we accomplished."

—Stephen Pizzello



Kundun **presents the life of the 14th Dalai Lama in a series of lyrical, dreamlike sequences photographed with consummate skill by Roger Deakins, who combined naturalistic lighting with director Martin Scorsese's penchant for kinetic camera moves.**

Photos by Mario Tursi, courtesy of Touchstone Pictures Company.

Creative Freedom

- Incomparable system performance
- Applications: helicopters, aircraft, cranes, camera cars, cable rigs, boats
- Largest variety of helicopter nose and side mountings
- Motion record with precision differential GPS position data option
- Camera formats:
  35-4 perf; super 35mm,
  Vistavision (in-house);
  65-5 perf (in-house);
  65-15 perf (Imax).
  All formats with 1000' film loads
- High speed wireless data link permits remote control of camera up to several miles for cable cam, crane and other specialized applications

1995 Academy Award

for "expanding the boundaries and applications of stabilized cinematography"

Features

Titanic • Twister
Con Air • Horse Whisperer
Bird Cage • Waterworld
Independence Day
Hard Rain • Kundun

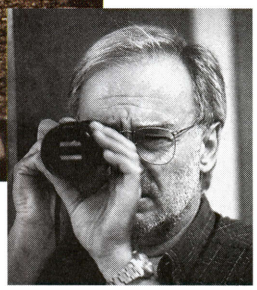
Commercials

Nike • Mountain Dew • Pirelli
Lexus • Molson • Saab
Chevy Blazer • Kodak

SpaceCam Systems, Inc.
31111 Via Colinas
Westlake Village, CA 91362
818.889-6060 • fax 818.889-6062
www.spacecam.com

SPACECAM

True Luminaries



Photos by Peter Sorel, courtesy of Warner Bros.

In *L.A. Confidential,* Dante Spinotti added modern touches to classic film noir style. The look of the film was heavily influenced by the work of renowned still photographer Robert Frank; Spinotti says that he attempted to compose scenes as if he were shooting with a Leica.

Dante Spinotti, ASC, AIC
L.A. Confidential

The paradise-on-Earth veneer which Los Angeles evinced in the wake of World War II is as thin as a quick coat of varnish in *L.A. Confidential,* a screen adaptation of James Ellroy's novel of ambition and corruption run wild (see *AC* Oct. '98 for complete coverage). This dark world was vividly brought to life onscreen by director Curtis Hanson (*The Hand that Rocks the Cradle, The River Wild*) and Italian cinematographer Dante Spinotti, ASC, AIC, whose credits include *The Last of the Mohicans* (for which he earned a 1992 ASC Award nomination — see *AC* Dec. '92), *Manhunter, Beaches, Crimes of the Heart, Frankie and Johnny, True Colors, The Quick and the Dead, Nell, Heat* (see *AC* Jan. '96) and *The Mirror Has Two Faces.*

Rather than screening film noir classics for visual inspiration, Hanson and Spinotti pored over the work of Swiss-born still photographer Robert Frank. They were particularly intrigued by Frank's 1958 book *The Americans,* a collection of gritty, startling black-and-white photographs documenting American life during the the mid-Fifties. Spinotti found himself moved by Frank's "strong selection of elements, his way of bringing symbols into the shots. His work is passionate, but it is passion filtered with intellect. On *L.A. Confidential,* I tried to compose the shots as if I had a still camera in my hand. I was constantly asking myself, 'Where would I be if I were holding a Leica?' This is one reason I suggested that we shoot in the Super 35 widescreen format; I wanted to use spherical lenses, which for me have a look and feel similar to still-photo work. We also knew we would be shooting a lot at night. With anamorphic zoom lenses, which we used on *Heat,* you are limited to a stop of f5.6; with spherical lenses you can open up to f2.8, 2.3 or more and still get a very sharp image. We also wanted to have the ability to move around and use Steadicam, which is easier with spherical lenses."

The director and cinematographer agreed that Robert Frank's influence resonates in almost every aspect of the film's look, from lighting and camera angles to the selection of locations. Spinotti was particularly fascinated by the photographer's inclusion of "practical" lights in his photographs, noting, "I told the production designer, 'You will love this film, because what you select as practicals will be our major sources of light.' In fact, practicals were quite often our key lights on this film."

Was Spinotti concerned about the problem of practical key lights "burning out" on screen? "No," he answers. "In fact, I wish I could have burned them out more, because I like that look. As you look at Frank's photographs, you see there is often a halo around the lights. These halos are one of the things people are often struck by in his work. I think that 'burnouts' and halos worked for us as well in *L.A. Confidential,* enhancing the period and mood."

Despite his departure from the classic film noir style, Spinotti did include some traditional motifs in his overall photographic approach, such as the occasional appearance of menacing, exaggerated shadows, or shadows cast on walls by venetian blinds. One of the more notable visual aspects of the picture is the cinematographer's use of darkness to surround and highlight the most important aspect of each tableau, much in the way that early filmmakers actually vignetted the edges of a scene to emphasize its vital elements. He explains, "I like to shoot dark images. I'm drawn to the mystery of darkness with brightness in the center; that's instinctive to me."

—Eric Rudolph

■

OCONNOR

PROFESSIONAL CAMERA SUPPORT SYSTEMS

A division of Q-CO Industries, Inc.

See OConnor's full line of Fluid Heads, Tripods and Accessories at
SHOWBIZ LA - Booth 1207

David Breashears, Robert Schauer and members of the Sherpa camera team set up the lightweight IMAX II camera on an OConnor 2575B fluid head over a crevasse in the Khumbu Icefall below Mount Everest in Nepal.

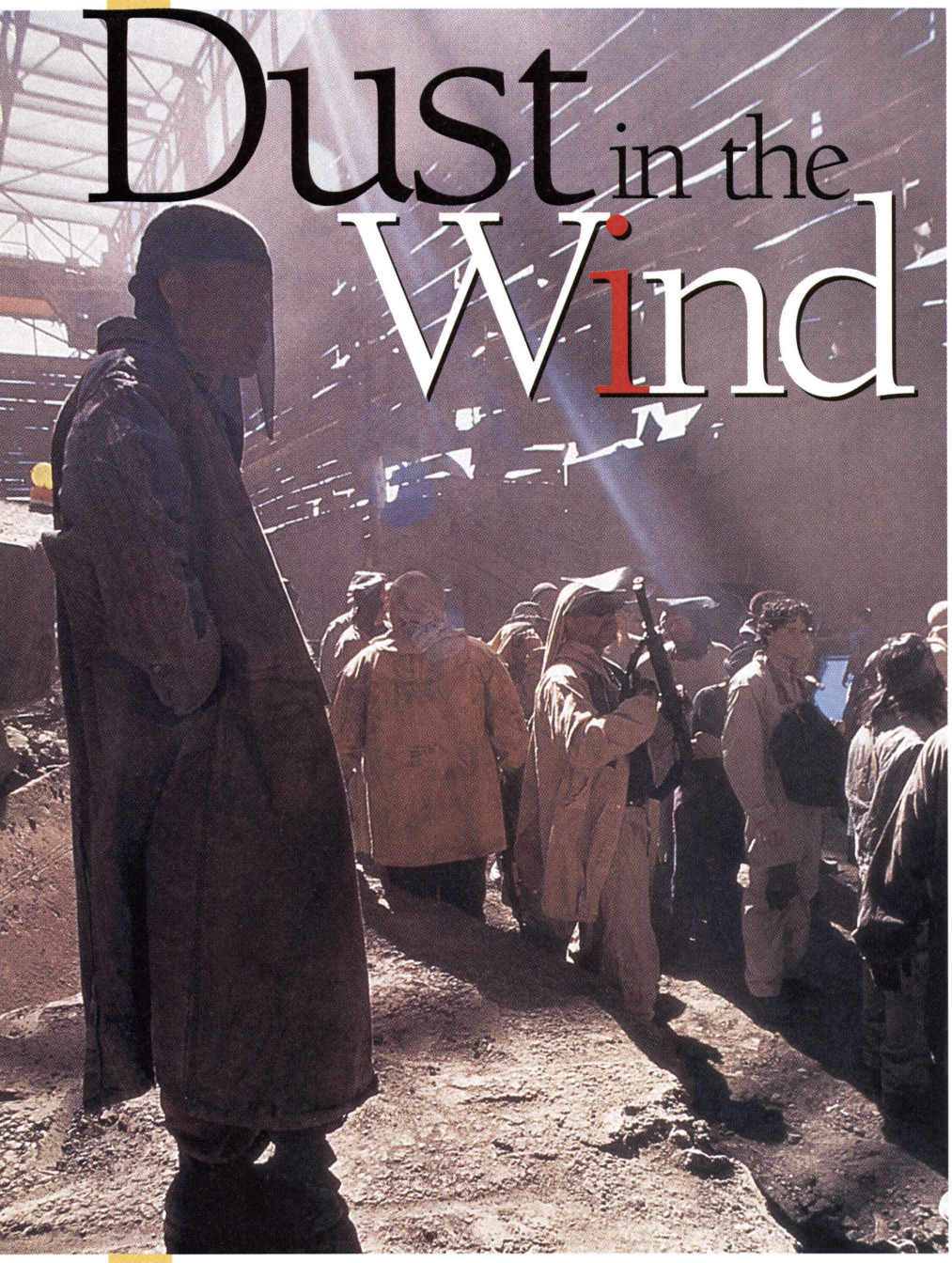
From the large format film EVEREST, a MacGillivray Freeman Film, presented by Polartec ®

Photo © Araceli Segarra / MacGillivray Freeman Films.

Let OConnor help you reach the Peak of your Creativity

100 Kalmus Drive Costa Mesa, CA 92626 Tel 714-979-3993 Fax 714-957-8138
http://www.ocon.com e-mail: sales@ocon.com

Dust in the Wind



Rod Serling's sci-fi tale *A Town Has Turned to Dust* is brought to life as an atmospheric television movie shot on Digital Beta.

by Mickey Freeman

Photography by Brett Colvin

Set in a bleak futurescape, *A Town Has Turned To Dust* depicts the imminent collapse of Earth's ecological system: continents are turning brown, and any precipitation is the exception rather than the rule — rain hasn't fallen in 300 days. Penned by the late visionary Rod Serling, creator of *The Twilight Zone* and *The Night Gallery*, the cautionary tale is a character study centering on the inhabitants of a town called "Carbon" in the year 2215.

This USA Network Movie of the Week is the fourth collaboration between director Rob Nilsson and myself. I first met Rob in 1992 at a warehouse in San Francisco's South of Market area, where he was interviewing cinematographers for *Chalk*, his movie about a dysfunctional family that runs a pool room. The film's unusual casting brought homeless people into the world of filmmaking; it was an intriguing project, and Rob and I connected very quickly on matters of social philosophy and photographic style.

When Rob asked me to shoot *Dust*, a question arose about whether to shoot on film or with video. The network and the production company had only shot film for its narrative projects, and although my background is in film, Rob and I had shot with video for *Chalk*, which was captured on BetaSP and framed for 1.85:1 (always keeping in mind the eventual 35mm blow-up). We resolved to shoot long takes while searching for what the great still photographer Henri Cartier-Bresson once referred to as "the decisive moment."

[Ed. note: Not incidentally, Nilsson helped pioneer the notion of video-shot feature production in the 1980s with his documentary-flavored films Signal 7 *and* Heat and Sunlight.*]*

Given our modest budget, various economic considerations had to be taken into account. Without getting into the worn-out arguments of the film versus video

Photos courtesy of USA Networks and Mickey Freeman.

"look," I asked myself about the cost-saving comparisons between the two mediums. I generated a budget based upon a weekly breakdown comparing the 35mm, Super 16mm, and Digital Beta formats. The budget criteria entailed camera rentals, raw stock, processing and workprinting 85 percent of our footage on a weekly basis. For Digital Beta, we had to factor in submastering on BetaSP to enter into the Avid instead of processing and workprinting.

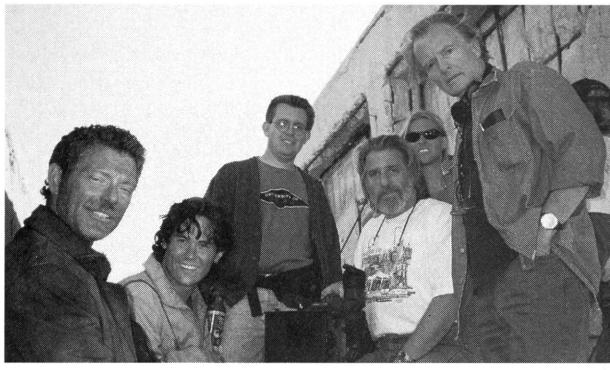
The costs broke down as follows: 35mm — $37,490 weekly; Super 16mm — $21,890 weekly; Digital Beta — $7,412 weekly. The respective raw stock prices were $55,000 for film and $1,500 for tape. Intrigued with the new technology, economics finally enticed the production company and the network to shoot with Digital Beta. My recommendation was that the finished result should go through a film-look process for broadcast. Among the advantages of shooting Digital Beta were the following: the footage seen in the monitors was what was actually being recorded; I would have the ability to "light by eye" and confirm the results on the monitor without having to pull out a light meter; takes could be of longer length, thus eliminating worries of an interrupted performance; and we would all have the opportunity to gain experience using leading-edge technology.

My instincts for composition, camera movement, and lighting remain the same whether shooting film or tape, despite the visual differences between the chemical and electronic mediums. The tape-based format does have its shortcomings, however. There are inherent drawbacks in the cabling required by video; limitations abound in the choice and quality of video lenses; electronic lighting latitudes are not as broad; and the hardware has yet to be designed for long-form dramatic work. In the film realm, there are dailies of "circle takes" shown either in workprint form or on video the next day. If we shoot eight or nine takes and print just one or two, then our viewing time for dailies is concise and efficient. While working with the timer at the lab, you can communicate the aim for moods and subtleties. In video you "print" or dub everything over to a viewing format such as VHS and view your dailies. The poor quality of a VHS viewing copy after originating on Digital Beta can defy description — colors shift, contrast builds, and the subtleties are gone. Making decisions for the finessing of imagery is difficult; therefore, establishing and confirming one's images *while shooting* is extremely important.

Steel Work

Most production companies shoot in Utah for the state's geographical beauty, unparalleled rock formations, rugged majestic mountains, and endless horizons. We, however, were enticed by an old abandoned iron ore smelter set into the side of a mountain near the town of Goshen. This unique location looked like a civil war embattlement formed with eight giant mix-master cauldrons all set in falling mortar. We also found a steel mill, an auto wrecking yard, and a county jail, all of which were noted for their grimy environs. For six weeks we scouted and shot in these compelling locations, capturing stunning panoramas set against steaming primordial landscapes shaped from the steel mill's molten slag heaps. Our backdrops consisted of huge tailings of abstractly-shaped cooled-down steel, resembling solder splatters dropped from heaven.

The setting of *Dust* is a toxic sulfuric landscape devoid of moisture; the locals are hot and nervous, and live an anxious existence. Rob wanted a dark, mysterious, and claustrophobic feel throughout the telefilm. Although the producer was very supportive of what we were trying to accomplish, she was concerned about going "too dark" for television. Sometimes the director, producer, video engineer, gaffer and myself would confer around the monitor trying to determine how *dark* was dark. Occasionally, we worked at four to six footcandles, knowing full well that we were pushing the video tolerances. Our interior lighting was motivated by lanterns, torches, overhead practicals, and a few daylight sources. Working at these low light levels became feasible if we could project a scratch of light onto someone's face, or put some light in the background for separation. In the jail scenes, we hung three wall spreaders' worth of Tweenies, Babies and Juniors tied into a dimmer board. At the start of the scene the lights would go out, allowing the remainder of the sequence to be played out in a dark ambiance motivated by kerosene lanterns. I chose to cover everyone in a rim or backlight with just enough light in the eyes for a slight luminance. Depending upon where the lanterns were being used in a shot, ¼ CTO was added to some of the instruments. From the room's windowed side, we added ½ CTB on the Junior for a night rim. I also found creating shadows or arbitrary patterns in the background to be a great help in stimulating a visual interest in the frame when the actors appeared in more of an even light. Lighting ratios are more restrictive in video, so the image therefore requires more light in the shadows. But allowing the shadows to go dark creates a sense of mystery and intrigue.



Opposite: Sunlight streams in on the pitiful inhabitants of the future-flung town of Carbon. Above: The cast and crew on location in Goshen, Utah included (left to right) actors Stephen Lang and Gabriel Olds, first assistant Dean Hoff, director of photography Mickey Freeman, key grip J.J. Johnson (in sunglasses), and director Rob Nilsson.

Dust in the Wind

The primitive world depicted in the film demanded that sources be restricted primarily to fire-light and daylight effects. The gritty nature of the location environment prompted Freeman to take extra precautions to prevent dust from contaminating the DVW 700 camera's recording heads.

I place locations into two categories: an environment the actors and action play within, and one that becomes a character and has a personality and texture which the actors can play *against*. The latter is more interesting and affords us the ability to photograph the environment as if it were another principal in the scene. Using foregrounds, backgrounds, textural motifs, colors, and light, the location dictates its own photographic demands.

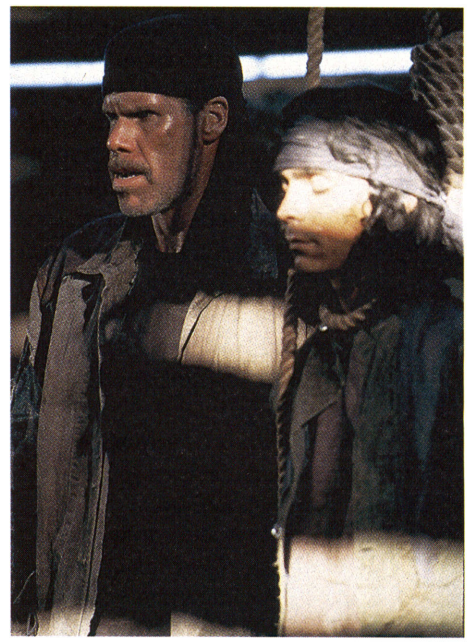
One such site was the epic proportioned building at the steel mill, where the lynching of "Tommy Tall Bear" occurs. About 150 extras were brought in to embody the lynch mob. The steelworkers dubbed the building the "Skull Cracker" because for some 30 odd years, scrap metal was broken up by four-ton steel balls lifted 80' in the air by electromagnets and dropped onto objects below for crushing. This edifice measured about 250' long, 120' wide, and 110' high. Comprising its sides were rotted slats of wood and metal that allowed sun, wind and rain to pierce through its shell. Its top was open to the sky, allowing two immense cranes to span the width and traverse its length. Tommy Tall Bear was to hang from a hook dangling off one of these cranes, and be lifted in the air until dead. On the floor of this edifice were rail cars on tracks, as well as huge steel jaws from old cranes — rusted implements found only in a steel forge, which reminded me of sets from the old television series *The Prisoner*.

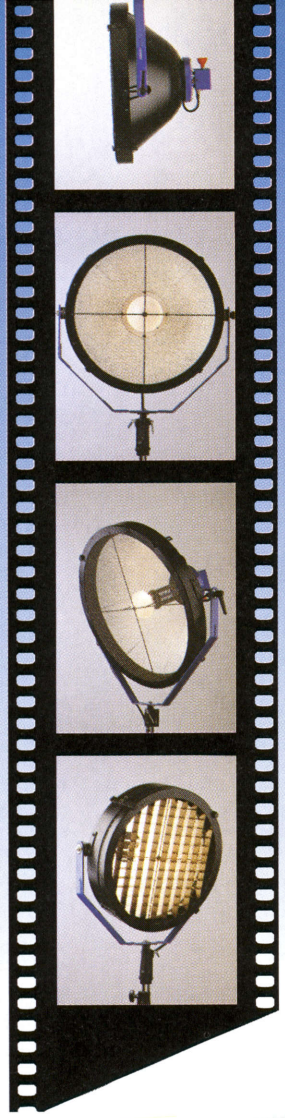
We had 24 daylight setups to shoot for this scene. One camera was fixed at ground level and a second camera was mounted on a 30' Cam-Mate arm. We walked in to set up the first shot with both cameras, only to be hit by an enormous wave of electromagnetic energy that lent the monitors the appearance of a lava lamp. We first assumed it to be a mere pocket of magnetism, but upon moving the cameras to various places inside the building, this surge became omnipresent. During our scout five months earlier, we had shot S-VHS tape of each location, and at the time the problem had been nonexistent. Our concerns about how all of this magnetism might effect the video equipment prompted us to take everything outside the building. But when we played back images outside, the video still looked as if were on electrified acid.

After discussions about re-scheduling, shooting elsewhere, requesting a film camera, and continuing to test for possible solutions, we slowly marched back inside. Handholding one camera and monitor, we entered the space with great trepidation, and within 25' of the outer door we again experienced this ripple effect. In discussions with people at the mill, we suggested the possible removal of the four-ton wrecking balls, which we believed had become magnetized and were the cause of our problem. They agreed, and while their heavy equipment relocated the balls, we restructured the day's schedule.

Even after the balls' displacement, we remained unsure of residual magnetism, but we re-entered the space with more hopeful anticipation, and this time it worked. Nevertheless, we spent the entire day dodging areas which caused rainbow ripples to course through the monitors. Fortunately, only minor repositionings of the camera were required to avoid the problem. We got our first shot off 4 ½ hours into the day and shot most of our setups from the Cam-Mate, which facilitated any necessary repositioning.

The delay put us considerably behind schedule, but we shot our





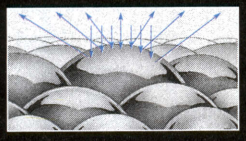
OpTex®

aurasoft®

See it and believe it.

A Revolution In Natural Lighting

"Without a doubt I shall be using Aurasoft on future productions" Brian Tufano



The remarkable Aurasoft reflector consists of thousands of tiny spheroidal convex mirrors, each reflecting angled light across the path of the adjoining mirror.

The thousands of individual light beams criss-cross one another and reduce the directness of the light, creating an effect of quite surprising natural softness, giving shadows that are comparable to the soft natural shadows of skylight.

- Two lantern sizes: 600mm & 800mm
- Interchangable lampheads: MSR/HMI 1.2 kW, 2.5kW & 4kW. **New** 1.2kW with combined ballast/ignitor; Tungsten Halogen switchable between 1/2/3kW and 2/4kW
- Egg Crates and Colour Frames available
- Uses standard lamps

North America: Bogen Photo Corp. 565 E. Cresent Ave., PO Box 506. Ramsey, NJ 07446-0506
Tel: **(201) 818-9500.** Fax: **(201) 818 9177**

Far East: Salon Films (Hong Kong) Limited
6 Devon Road. Kowloon Tong. Kowloon. Hong Kong
Tel: **(852) 2338 0505.** Fax: **(852) 2338 2539**

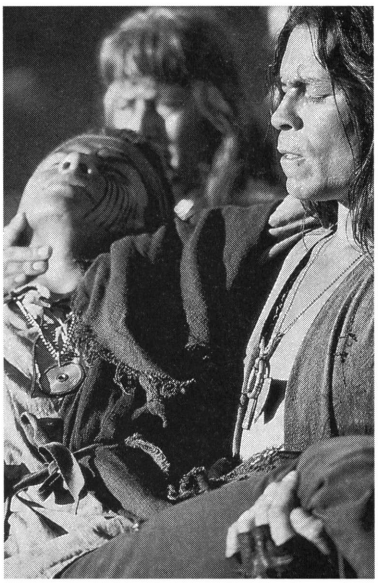
China: Beijing Salon Films
77 Beisanhuan Zhong Road. Beijing 100088
Tel/Fax: (8610) **6204 0336**

India: Perlink India
E-1/16 Darya Ganj. New Delhi 110002. India
Tel: **(11) 327 3876.** Fax: **(11) 327 7280**

International Sales. OpTex UK.
Tel: **44+(0)181 441 2199**, Fax: **44+(0)181 449 3646,**
e mail: **info@optexint.com,** or read more on:
www.optexint.com/optex

OpTex®
Working to improve your image

Dust in the Wind



Tooth (Frankie Avina) cradles a fallen comrade. HMIs were used to add rims and fill for the predominately day-lit sequences.

close-ups night-for-day. To augment the fragmented light seeping into the space, we brought in a 20K and various smaller HMIs — ranging from a 4K Fresnel to 1200W Pars — to give us the needed rims and fill. Still, the natural light sifting through the cracks in the walls and striking the actors was stunning. The light allowed for a handsome photography of the poignant scene — it's hard to beat the random beauty of natural light.

At the scene's onset, the lynch mob is dragging Tommy into the shed toward the crane. To add to the frenetic environment, we placed about 20 yellow blinking highway lights rented from the Utah Department of Transportation to build a light path for the mob to pass through. The day's madness was quite inauspicious, but in the end we made the schedule and captured some rather pretty imagery. Much credit is due to video engineer Ted Phillips, gaffer Eric Blum, second camera assistant John Reid and key grip J.J. Johnson.

From the outset, I was told that Digital Beta equipment was very susceptible to dust or any other fine particulate matter floating in the air. Due to the possibility of these particles infecting the recording and playback heads, we carried with us an analog BVW 50 BetaSP VTR in case the Sony DVW 700 camera heads went down. The locations in question were exposed to dust, metallic fibers, and coal so we chose to shoot 40' tapes, so that the DVW 700's recording heads wouldn't be exposed to the elements quite as often. Thankfully, we experienced no down time due to clogged heads.

On exteriors, I used nets behind the lens, as well as various grads; for interiors, I pulled the nets and used Tiffen Soft FX filters to avoid the "crossed star" effect when shooting into light sources. Our cameras and support gear was rented through Magnetic Image in San Rafael, California, and as we proceeded into production, the

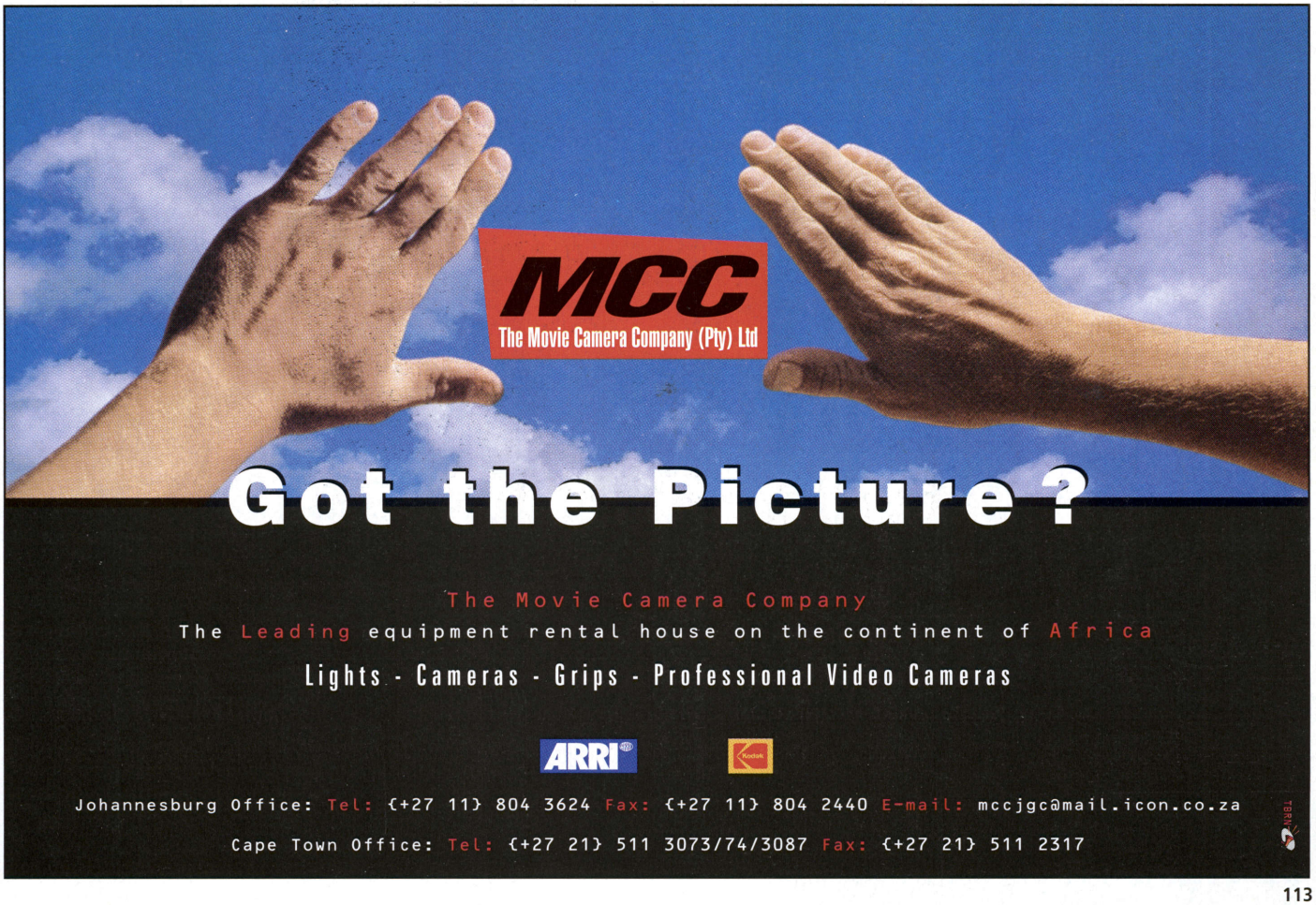
support of Peter Schofield and Larry Kenworthy proved invaluable.

During one night exterior scene, two characters (played by Stephen Lang and Gabriel Olds) are sitting around a fire relating the history of a ruined temple that once served as the setting for sacrifices and religious ceremonies. In actuality, the site was an abandoned ore smelter perched on the side of a mountain; it comprised eight stone cauldrons (20' in diameter and 12' deep) surrounded by collapsed ruins. After determining that night shooting would be too dangerous and slow due to steep terrain and unstable footing from loose shale, we were forced to shoot day-for-night. Four-wheel-drive and all-terrain vehicles were required to transport lighting fixtures, grip equipment, cables, and cameras up the mountain. Once set up, we began to toy with the color and density controls to create the day-for-night ambiance, which would culminate with a sunrise.

Finishing Touches

Visual effects were to be layered onto the sky to generate a "dust ring," and we wanted the graphic artist to have a picturesque sky which would enhance its augmented artistry. After some experimentation, we committed to an underexposed red environment with a yellow-looking sky. Two 1200W Pars combined with 4' x 4' gold mylar frames produced a moving firelight fill on the actors. One true asset of video is its ability to fashion a "look" on location by merely turning a dial. The color-control unit allowed us to develop a palette to shape a surreal environment, and to match color and density from scene to scene.

We controlled the density, black levels, hues, contrast ratios and continuity using waveforms, color-control and playback capability as our guides. Ted Phillips, the video engineer from Dallas, was a magician with the CCU and had a great eye for continuity. For example, adding life into the image's black hues not only created a psychological tone, but provided a subtle and effective means of image manipulation. A basic black balance provides only a neutral black starting point; slightly warm or cool blacks add information to the scene. In *Dust* the highlights were shifted in tint to the chromatic complement of the blacks; this provided a variation in the frame's color information that suggested representation of all colors (one such combination would be peach-tinted highlights with plum-tinted blacks). Phillips notes, "I chose to create a full-spectrum frame [to help provide a] psychological effect. If the key light was cool, then the shadows were



The New
Jimmy Jib
TRIANGLE

* Made Of Super Rigid, Triangular, Aluminum Tubing
* More Stable
* Bigger, Beefier Head
* Extends to 30ft (9.1m)
* Breaks Down To a 3ft 8in Package

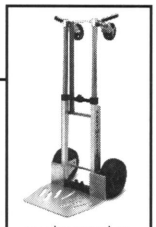
Starting at
$8,235.00
(Standard jib with remote head)

Stanton Video Services Inc.
2902 E. Charleston Ave.
Phoenix, Arizona 85032
Tel (602)224-6162
Fax (602)493-2468
e-mail: jimjib@goodnet.com
Web: www.goodnet.com/~jimjib

IT'S STRONGER THAN YOUR BACK!

American made
KART-a-BAG® manufactures a complete line of quality engineered telescoping carts and hand trucks.

HD-500s



can be used as a upright hand truck

SPECIFICATIONS

Moves 500lbs. in upright hand truck or flatbed modes • Patented pushbutton opening/closing • Square aluminum and stainless steel rods • Extruded aluminum nose plate • 8 1/2" pneumatic or solid polyurethane tires • 6" non-marring polyurethane ball-bearing wheels • *Optional* one or two shelves • Patented Top shelf can carry 200lbs. • Both shelves fit storage size • 2 shelf weight 20lbs, • 42lb. storage weight • **10** year limited warranty

Telescoping rods & folding components for easy storage.

With sturdy shelves & locking wheels the HD-500 can be used as a portable table.

KART-a-BAG®, Division Of REMIN
510 Manhattan Rd., Joliet, IL 60433
800-423-9328 Intl: 815-723-1940
Fax: 815-723-2495

REMIN KART-a-BAG®

Dust in the Wind

pushed warm. Since the story centers on the stress of characters who feel like a victim of their surroundings, I wanted to produce this "stressed" notion in the image. With digital cameras, you can lower control levels down to a range where you're creating reverse feedback [too low of a signal] in the blacks. This causes an unearthly vibration or crawling in the pixels. As this occurs only in the densest areas of the image, it provides an unsettling motion at the background level, creating tension in the eye of the viewer."

Robert Fiske in New York handled all of the film's effects and model work. There are computer graphics of planets and stars in an earthen sky, live action of a spaceship model shot on location with the actors, and studio footage of space debris circling the Earth.

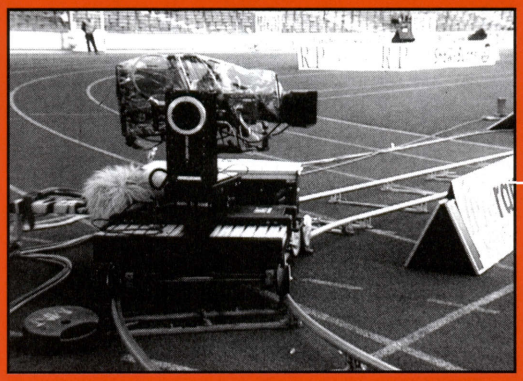
Pacific Video Resources in San Francisco performed the online edit and color enhancements. When we couldn't effect a particular color of sky on location, we matted it in during the online session: our blue Utah skies became red or yellow.

I sometimes equate what we do in this profession to sculpting. We start with an idea and add some tangibility, and then constantly chip away and refine the piece. There isn't any magical formula for getting it done, except to constantly chip, refine, and sculpt. Along the way there might be a magical beckoning when all of the elements involved — performance, camera, lighting, and sound — come together in pure synchronicity of style. ■

Mickey Freeman is a director of photography based in Marin County, California. A Town Has Turned to Dust *will air this month on USA Network's Sci-Fi channel.*

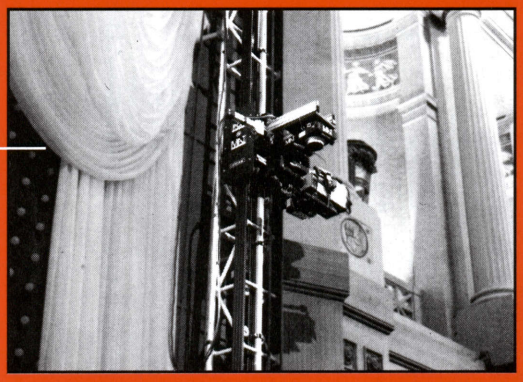
P.O.V.

POINT OF VIEW



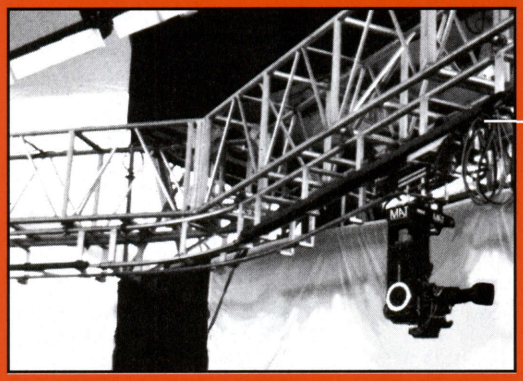
CRUISECAM™

MOTOR ASSISTED DOLLY SYSTEM, RUNS ON STRAIGHT AND CURVED STANDARD TRACKS.



LIFTCAM™

CAMERA POSITIONING SYSTEM, AMAZING VARIATIONS OF CAMERA ANGLES, VERTICAL, DIAGONAL AND HORIZONTAL TRACKINGS.



AEROCAM™

REMOTE CONTROLLED DOLLY + OVERHEAD TRACK SYSTEM, STRAIGHT AND CURVED TRACKS.

THE NEW DIMENSION IN CAMERA TRACKING TECHNOLOGY

GEFILM GROUP
CAMERA SUPPORT SYSTEMS

WEST COAST USA
PHONE: 818 376 6680

ace
atlantic cine equipment, inc

EAST COAST USA
PHONE: 212 944 0003

MOTION
TECNOLOGIA DO MOVIMENTO

BRASIL
PHONE: 21 507 3183

MAT®
SPECIALIZED REMOTE CAMERA SYSTEMS

GERMANY
PHONE: 40 540 82 20

A Teutonic Love Triangle

The critically-lauded German film *Not a Love Song*, directed by Jan Ralske and photographed by Hans Fromm, impresses audiences at the South by Southwest Film Festival.

by Andrew O. Thompson

Photography by Katia Klose and Sven Pannicke

Photos courtesy of Jan Ralske and Hans Fromm.

Winner of the German Critics Prize as 1997's Best Feature Film at the most recent Berlin Film Festival, *Not a Love Song* is the feature debut of writer/director Jan Ralske, a Texas native of Czech descent. Although the film boasts panoramic plains similar to those found in the wilds of West Texas, its setting is far removed from the Lone Star State's frontiers: Ketschdorf, a skeletal village on Germany's northeastern border with Poland. Nevertheless, the picture's trio of protagonists do embody a pioneering spirit of sorts — their task in this impoverished hamlet is to transform a disused rail station into a thriving cafe. The brainchild of this ambitious undertaking is Karl (Matthieus Freihof), a stiff advertising executive forever

spouting his unrealized capitalist theories. Joining him in the endeavor are Luise (Anna Thalberg), the free-spirited spouse he tends to neglect, and Bruno (Lars Rudolph), a laconic loner smitten both with wanderlust and Karl's wife.

Ralske first studied film at the Rhode Island School of Design (RISD) during the mid-Seventies, when his fellow undergrads included the rock band Talking Heads, who, he says, "were still playing in local bars." After graduating from the avant-garde art school, Ralske emigrated to Eastern Europe. In 1988, he enrolled in the graduate directing program at the West Berlin Film School (DFFB — Deutsche Film und Fernsehakademie Berlin). An institution known for encouraging artistry and radicalism in the work of its student body, the DFFB is also the alma mater of cameraman Michael Ballhaus, ASC and director Wolfgang Petersen. Besides having made several short films — including *Der Partisan* and *Vergagnen, Vergessen, Voruber* — he has worked in German journalism as a photographer for *Tageszeitung* and as a freelancer for Deutsche Welle TV.

While living in Germany, Ralske experienced the collapse of the Berlin Wall and the divided nation's subsequent reunification, and his American upbringing gave him a unique outlook on the pangs produced by the country's abrupt political metamorphosis. At its crux, *Not a Love Song* is a look into the weighty and wacky ways in which an overnight market economy impacts a populace fostered on socialism. At one point, Ralske even had to rewrite portions of the script due to the concerns of his TV financiers, who felt that the screenplay had too much of a pro-socialist slant. He explains, "We conceived the film as black-and-white because we wanted it to be timeless — you wouldn't know if it was one year ago or 20 years ago. We're dealing with some German political themes that are very touchy subjects, and knowing that this was supposedly set just a year or two ago — during the reunification of Germany — would present some problems for the story."

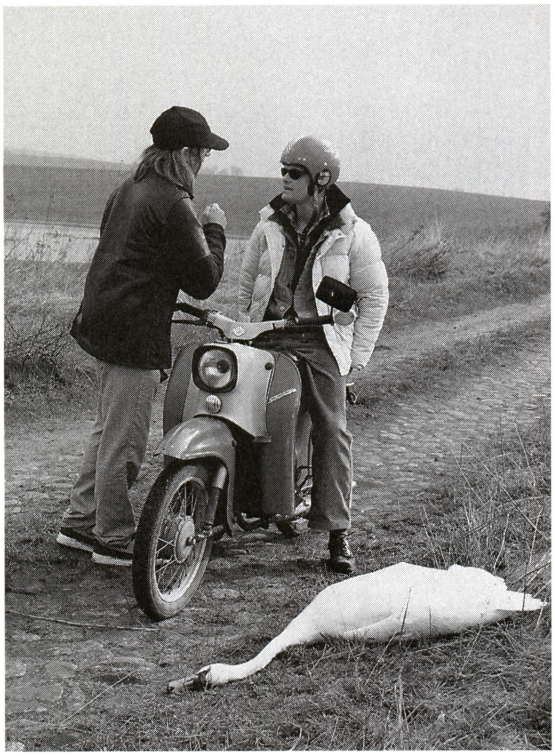
The director notes that the minimalism of *Not a Love Song* owes much to the spartan styles of American indie director Jim Jarmusch (*Mystery Train*, *Dead Man*), Finnish filmmaker Aki Kaurismäki (*The Match Factory Girl*, *I Hired A Contract Killer*) and fellow Czech director Milos Forman's early work, particularly *Black Peter* (1963) and *Loves of a Blonde* (1965). Irrespective of these influences, Ralske perceives his film as having an air of "romantic nostalgia." The director discloses, "As far as our aesthetics, we wanted to get as far away from realism in the usual sense of the word. We were also going for a very stark, reduced look — almost like a [Samuel] Beckett play, in that it was very barren and a fairy-tale type of story."

Besides signifying the characters' plight, the bleak environment also provided Ralske with a visual counterpoint to his metropolitan living experience. He notes, "When the wall was in Berlin, you could never focus your eyes very far away because the wall was in front of you, and the city was all around you. So we picked this part of the countryside [in Brandenberg] for the effect of having this big, open look — very wide, and very minimalist. It reminded me of America in general, and Texas specifically, when you get a little bit further west where there are very wide horizons." The former agricultural area was so remote that the production often couldn't even get food up to their site.

While shooting in Brandenberg, the director touched upon his Texas comparisons to placate a populace accustomed to 70 percent unemployment. Recalls Ralske, "At the beginning there was a little bit of tension with the people in the village. For one, our crew was 80 percent women, so [from the residents' perspective], I was this American guy who had shown up with a "harem" and started building all of this expensive-looking equipment. So I introduced myself as being from Texas and said, 'You know this looks just like Texas,' which calmed them down and charmed them most of the time. The experience was something very new to them, and they actually got into it. When we were shooting at night, they parked their cars and stood around with their six-packs and kids, watching us all night long

Opposite: Cameraman Hans Fromm and focus puller Eeva Fleig prepare a shot in the barren landscape of Brandbenburg, Germany. Above: Married spitfire Luise (Anna Thalbach) trys to placate pensive loner Bruno (Lars Rudolph) — in an actual film clip.

A Teutonic Love Triangle



Texas-born director Jan Ralske explains charcter motivation to actor Lars Rudolph. The fallen fowl in the foreground sets up Bruno's amusing observation that Ketschdorf is so depressing that even the animals are committing suicide.

— it became like a drive-in movie theater."

Ralske and his Bavarian cameraman Hans Fromm (*Cuba Libre, Die Beischlafdiebin, Der Strand von Trouville*) had scouted their locations during the winter, a time when Brandenberg appeared so drab and depressing that according to the cinematographer, "one of the running gags was that it looked like Sarajevo after the war. That was the impression we got, so we had to do some [mental] abstraction because we knew we would have much more beautiful light [in the springtime]."

Made for a total cost of approximately $150,000, *Not a Love Song* received its capital from four different sources: two national arts councils and two state-funded television stations. The potential usage of monochrome stock, however, caused conniptions at a national network which had plans to broadcast the film on TV. Mindful of this dilemma, the filmmakers left their backers unaware of their black-and-white blueprint until the 11th hour. However, this almost put them in the position of having to reconceptualize the picture's art direction for capture on color celluloid. Attests Ralske, "One TV station was not going to let us do it, arguing that they don't even broadcast *Citizen Kane* before one in the morning because it's in black-and-white; they immediately lose their audience, which thinks it's just some cheap old film. But the experience we've had from festivals and 'normal' audiences is an appreciation for the aesthetics of black-and-white. Nowadays there are music video clips in black-and-white, so there's not as much of a problem with kids who are 16 — they don't associate black-and-white with old fashions. Maybe this is a hopeful trend, because even in Europe you don't see many 35mm black-and-white films that make it past the festival route.

"[The TV station] was also accusing us of making a film that was going to be too depressing," he continues. "But to be perfectly honest, if we had shot in color, with beautiful green landscapes and gray houses, it *really* would have been depressing! The black-and-white lends the visuals an [even] tonality, so you don't see how decrepit some of these villages and houses are. We were joking that it looked like Bosnia, but this was [the former] East Germany, where the people were living under socialism. One of the bad sides [of the socialist system] is that no one was taking care of any of this property — it basically didn't belong to anyone, so why should they bother renovating it? As a result, some of the villages are pretty run down."

The filmmakers chose the standard 1.85:1 format to encompass the endless vistas as a backdrop to their scenic tableaux — a luxury made affordable because the movie was primarily crewed by film students. But even with such a broad cinematic canvas, Fromm operated an Arriflex BL-4 to create movements more or less restricted to editorial needs. "We don't have too much motion in this film because in our

1998 South by Southwest Fest

Though long heralded as a mecca of live music, Austin, Texas has also gained recognition as a breeding ground for independent filmmakers. Given the rising careers of such directors as University of Texas at Austin grad Robert Rodriguez (*El Mariachi, Desperado*) and hometown hero Richard Linklater (*Slacker, Dazed and Confused, The Newton Boys*), the Texas capital is now seen as a showcase for some of the state's top talent. It's not surprising that the city would support such offbeat artistry: given its laid-back and liberal bent within a state that's generally proud of its tough-talking machismo, one might best describe Austin as a Berkeley for beef-eaters. This is the fifth year running that the South by Southwest Festival (which began in 1987 as a strictly musical event) has included a cinematic component. Aside from a slate of more than 70 films, SXSW '98 also boasted a four-day conference which hosted panels geared towards alternative modes of funding, making and distributing movies. Listed below are this year's award winners:

Narrative Feature: *Men Cry Bullets*, directed by Tamara Hernandez and produced by Harry Ralston, Tamara Hernandez, Jessica Rains.
Narrative Short: *La Lecon*, directed and produced by Craig Marsden.
Documentary Feature: *Letters Not About Love*, directed and produced by Jackie Ochs.
Documentary Short: *Looking for Sly*, directed and produced by Kia Simon, Eve Conant and Jonathan Crosby.
Music Video: *Rick Lee*, directed and produced by Erica & Margee.
Experimental Short: *28*, directed, produced and edited by Greg Sax.
Animated Short: *Radioactive Crotch Man*, directed, produced and animated by Nick Gibbons.

IBC makes the difference

What's
in your diary
for September 11-15th?

Join the 30,000 key industry players, from over 100 countries, who visit IBC each year and take home the future of your business.

Amongst the 30,000 square metres of stand space you will find every major supplier of broadcast technology.

A full five stream, five day conference tackles the technical, management, economic and craft-skill issues impacting on your business both today and in the future.

And the IBC Widescreen Production Festival screens and rewards the best in widescreen TV production.

Take back the knowledge you need to survive and prosper into the next millennium.

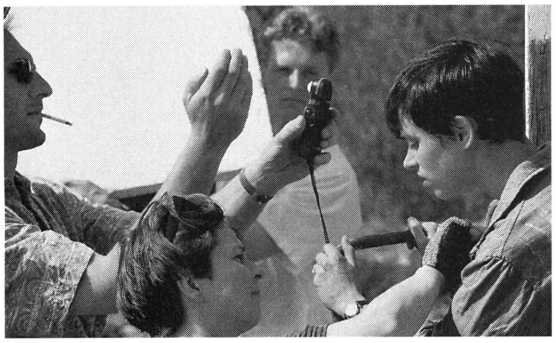
IBC makes the difference.

IBC98
AMSTERDAM
11 - 15
SEPTEMBER

TV • RADIO • CABLE • SATELLITE • FILM • MULTIMEDIA

IBC Office Savoy Place London WC2R 0BL United Kingdom Telephone: +44 (0)171 240 3839 Fax: +44 (0)171 240 3724 Email: show@ibc.org.uk
Website: **http://www.ibc.org.uk/ibc/**

A Teutonic Love Triangle



Fromm takes a light reading of actress Anna Thalbach while gaffer Matthias Gillner adds some bounce fill.

opinion, there has to be a good reason to do that," offers Fromm, a graduate of the Berlin-based Cinematographer's School (FOF — Fachschule fuer Optik und Fototechnik). "It always has to have some meaning to the shot, besides the fact that seeing some nice scenery passing [through the frame] is beautiful. Someone told me that my cinematography looked like an Edward Hopper painting. I thought that was an interesting comparison because like Hopper, I never try to have a really wide shot in a scene with a huge landscape and tiny people in there; I always focus on the interaction between the actors."

A typical camera tactic used on the film involved focusing on a solitary character in the frame and then engaging in a slow circular pan — of some 90 degrees — to reveal another figure in the nearby vicinity, thereby adding reference to the earlier part of the scene. This expansive use of spacial depth even factored into interior work. One such setup, for instance, begins on an empty, unmade bed illuminated by the ambiance of a flickering TV set; the shot then shifts slowly to the far wall's window, through which Karl stares downward, watching as Bruno and Luise take flight in his Mercedes. Fromm elaborates, "Inside there were two lights — one Ianebeam [a Teutonic technical term for "Redhead"] on a dimmer as a key source to do the flashing effects from the TV, and another located very low and bounced for fill. The reflection came from what we assumed to be an outside streetlight; I used a direct 2K Fresnel from outside to give some edge to that light within the frame."

On *Not A Love Song*, Fromm favored Kodak's 80 ASA Plus-X 5231 because of its sharp grain and subtle tonality. Budgetary constraints, however, limited the amount of film the production could procure. Operating at a 3:1 shooting ratio deterred them from taking chances with the low-speed emulsion, a significant consideration given their limited lighting package. As a result, the cameraman relied more on the faster 200 ASA Double-X 5222. The 26-day shoot took place last May, a month noted for some of Germany's

DOC CON

INTERNATIONAL DOCUMENTARY CONGRESS THREE

OCTOBER 28 • 29 • 30, 1998

ACADEMY OF MOTION PICTURE ARTS AND SCIENCES

INTERNATIONAL DOCUMENTARY ASSOCIATION

A three-day gathering of the world's finest non-fiction film makers, buyers, scholars and enthusiasts to examine Documentary at the Millenium

For information contact:
DOC CON THREE
8949 Wilshire Boulevard
Beverly Hills, CA 90211
Tel: 310-284-8422
Fax: 310-785-9334
e-mail: ida@artnet.net

shortest nights — only six to seven hours of darkness. Being so pressed for time on night exteriors, the cameraman quips that "some professionals might recognize the dawn in the background."

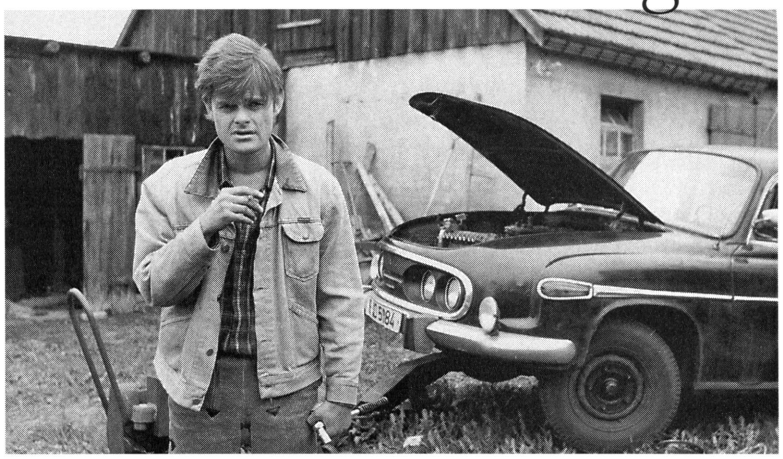
On the contrary, many of these shots are enveloped in an almost pure pitch-black ambiance. As the trio heads home one night in Karl's Mercedes, all that's visible through the windshield is the dotted line dividing the opposing lanes of traffic. To avoid an oncoming car, the vehicle swerves off road, coming to a dead stop on an embankment. As Bruno and Luise get out to assess the damage, the only illumination comes from the headlights and the auto's interior dome light, which is activated when a door is left ajar. Such a setup attests to the cameraman's preference for naturally-motivated lighting. Says Fromm, "It's more interesting to deal with what you have, so I always try to figure out where the light might be coming from; I actually don't like moonlight that much, simply because the moon doesn't shine all the time. So [in this scene,] what you see in the landscape is just the car and its headlights, and you only see the people after they open the door because there *is* light there. Of course, I set up something inside the car, but it

Ralske, Fromm, focus puller Fleig and crew capture Bruno and Luise fighting outside the train station.

30TH
1968 CAMERAS · LIGHTING 1998
CINEVIDEOTECH INC
Miami, Florida GRIP · TRUCKS · GENERATORS 305-754-2611
ANNIVERSARY
"Total Production Packaging"
ARRI 435, 535, BL, & 16 SR CAMERAS
MOVIECAM COMPACT CAMERAS
UNDERWATER LIGHTS & CAMERAS
TYLER AERIAL CAMERAS
STEADICAM & POGO CAMERAS
POWERPOD REMOTE PAN & TILT HEAD
EXPENDABLES, RAW STOCK, VIDEO TAPE
FEATURE FILM LIGHTING PACKAGES
TV-COMMERCIAL GRIP TRUCKS
GENERATORS UP TO 1400 AMPS
7330 N.E. 4th COURT • MIAMI, FL 33138
TEL: (305) 754-2611 • FAX: (305)759-2463

"A pair of aces"
100mm
60mm
Introducing the Super Cine Macro Lens with
AUTOMATIC COMPENSATING EXPOSURE!
100mm F/2.8,T3 ACE* • 60mm F2/2.8-22
* The macro compensating iris means no calculations or manual adjustment is needed to compensate for light losses which occur at short distances. As you pull focus through the various magnifications encountered in macro work, the linked iris *automatically* maintains an even exposure. And of course, like any true macro lens, the Super Cine makes no compromises within the Macro Focusing range.
Call **ZGC** now on:
Phone: (973) 335 4460
Fax: (973) 335 4560
www.zgc.com
Int. +44 181 441 2199
Int. Fax +44 181 441 3646
www.optexint.com/optex/
OpTex®
Working to improve your image

A Teutonic Love Triangle



Bruno strike a James Dean-like pose as he takes a break from fixing his vintage junker — an actual film frame. At Germany's Saarbrucken Film Fest, actor Lars Rudolph won Best Actor honors.

wasn't very much — a 100W Dedolight. But you understand the story in spite of the darkness: as Bruno crosses the headlights you will recognize him. In such cases, an image needs only enough [light] to tell the story and allow the picture to be understood without consideration for details."

The problems with stock shortages, extensive lighting setups and tight schedule all came to a head as the filmmakers shot night exteriors at an Autobahn waystation in Chemintz. Due to its functional mix of glass and steel architecture, the director refers to this space as a "post-modern truck stop." Here, Luise and Karl make a pit-stop for grub and gas, only to have their already-stolen Mercedes lifted by a pair of young punks. Disgusted with the pitiful situation, Luise leaves with an anonymous trucker who had been chatting her up in the restaurant.

The sequence was one of the few instances when Fromm substituted his standard-speed Zeiss lenses for Superspeeds. The cinematographer notes that the assistance of gaffer Matthias Gillner proved invaluable in getting all the shots done during the short span of nighttime hours. Opines Fromm, "That was a very bright location, because under this roof were hundreds of discharge lamps which provided general lighting for the gas station itself. I don't know the wattage [of the discharge lamps], but the f-stop beneath the roof was two stops underexposed even with an ASA of 200. From behind, we set up some 1200-watt HMIs; the gas station was a location where you could use such fixtures to light up the dust and the mist. On the parking space outside, I set up two HMIs to give us some strong edges, as well as a little frontal fill light to get an idea of what happens in the foreground.

Since *Not A Love Song* earned a great deal of critical praise at several European film festivals, along with Best Feature honors in Berlin, Ralske is well-positioned for his upcoming film. The new project will also be funded with televisual capital, this time from ZDL (Das kleine Fernsehspiel). The director notes that the benefit of dealing with network entities is that "you don't have to wait two years for major financing — you can propose a project, get funding, and shoot all within one year. They have very small budgets, but you don't have any real limitations in terms of aesthetics. You can do art films — some are very narrative and others are more atmospheric. It's one of the last little playgrounds left in the TV world, at least in Germany." ■

The World's Premier Computer Graphics Conference and Exhibition Learn about the latest research, art, animation, and emerging technologies in computer graphics and interactive techniques. Enrich your skills with courses and panels. Meet researchers, educators, artists, and practitioners from around the world. Get up-close and hands-on with the newest hardware and software tools from over 350 companies. For complete information and online registration: **www.siggraph.org/s98/**

meet some interesting characters

Tiny **Marilyn** **Woody** **ROBIT**

SIGGRAPH 98

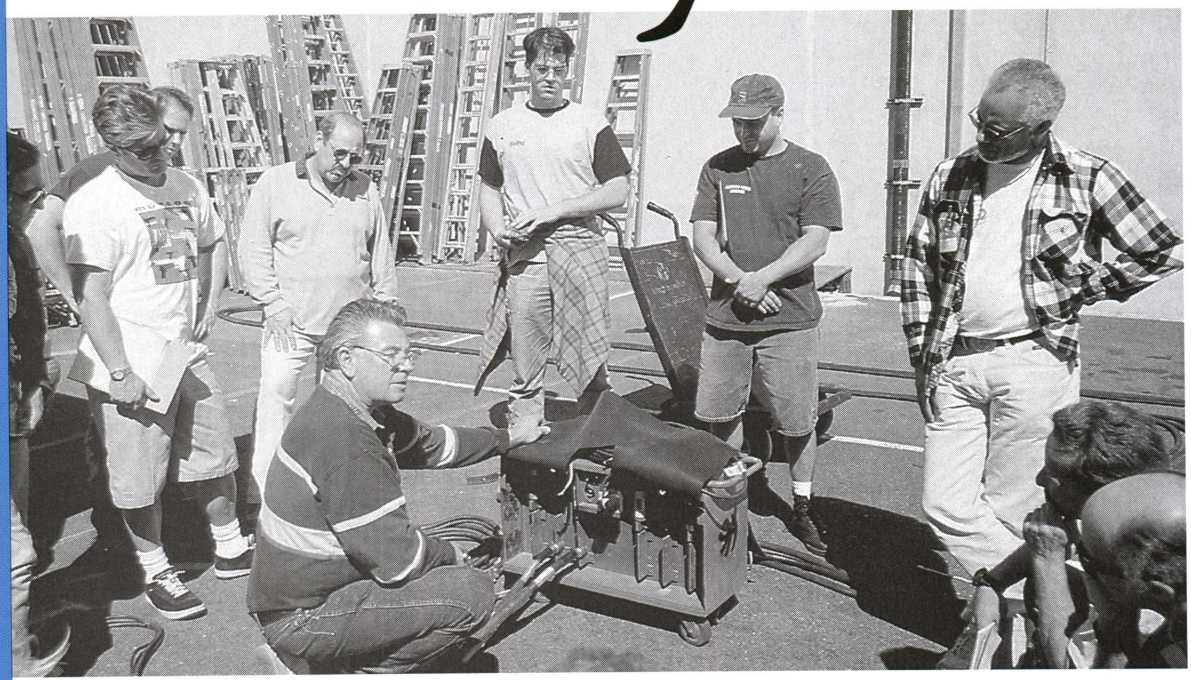
celebrating 25 years of discovery

Conference 19-24 July 1998 Exhibition 21-23 July 1998 Orlando, Florida USA Contact +1.312.321.6830 siggraph98@siggraph.org

Tiny ©1995 Paul Kevin Thomason, Texas A&M University Visualization Lab / Flashback ©1991 Nadia Magnenat Thalmann and Daniel Thalmann, University of Geneva and Swiss Federal Institute of Technology, Lausanne / Toy Story ©Disney, Image courtesy of Pixar Animation Studios / ROBIT ©1997 Tom McClure and Scott Benza, Microsoft Corporation

Sponsored by ACM SIGGRAPH

Better Safe Than Sorry



Hollywood Local 728 makes a commitment to safer sets with a new educational program for lighting technicians.

Article and photographs by Jay Holben

The last three decades have seen many changes in the motion picture industry. This is certainly not the same business that it was in the Fifties or Sixties: films have become more complicated and more expensive, and new advancements in technology are allowing moviemakers to expand the boundaries of imagination. With advancements in emulsion sensitometry, exposure is now possible from a single candle. Fixtures have been engineered to simultaneously reduce power consumption and increase output value, cameras have gotten smaller and more versatile, lenses have become sharper and faster, and every six months a manufacturer comes out with a new lighting tool which is brighter or softer than all the rest. The past 30 years has seen the decline and fall of the old studio system and the unification of a single national camera union. There has been a considerable expansion in the volume of films produced by Hollywood, and a growth in the number of people creating them.

This eruption of the industry is not without its pitfalls, however.

Several tragedies have transpired in the last half-decade: a stuntwoman's fatal fall during shooting at a major studio; the collapse of a camera crane at a crowded trade show; the failure of another crane on a set, resulting in the hospitalization of the cinematographer and operator; a fatal accident involving a camera assistant who fell asleep at the wheel of his car after many long workdays; and most recently, the electrocution of three technicians, one fatally, as a crane arm struck high-tension power lines during production. Suddenly, the necessity for safer practices on sets has reached a critical stage.

Stepping up to this new call of duty is Hollywood Set Lighting Local 728. The guild has seen its own tremendous evolution in the past five years, ballooning from 825 members to 1,782 as of March 1998. One problem in this increase in membership extends from the abolition of the "grouping system," which ranked members by seniority on the Local's roster. Now, all of 728's members are considered to be of equal designation — whether they have 30 years of experience, or 30 days.

Experience aside, however, the fact remains that with the mass manufacturing of new tools every year, and without any organized system in place by which to share information on the operation of these tools, every member of the Local is bound for new on-the-job encounters. Not understanding the parameters of a specific tool can have dire consequences. At the very least, the equipment could be damaged, resulting in costly repair bills for the production or rental house. Far worse is the fact that injuries or even fatalities can result from the failure to properly operate some the extremely technical equipment being used on sets today.

To avert such calamities, an industry precedent is being set at Hollywood Rental Company's new Burbank facility, where Local 728 has been organizing official training sessions for its members. Dubbed "Safety First," the training program spans six Saturdays. Each session last six hours and presents intensive information on many topics, including general safety, liability and codes, basic electricity, rigging with power distribution systems, location rigging, proper stage rigging and striking of aerial lifts, equipment repair and troubleshooting. "This kind of program was actually proposed back in 1968," says Safety First supervising instructor Earl Williman, a 728 executive board member who played an instrumental part in launching the program. "We did have a training program at one time that involved a local college, but it was based far too heavily on theory. We put this program together in a way that everybody can understand and relate to."

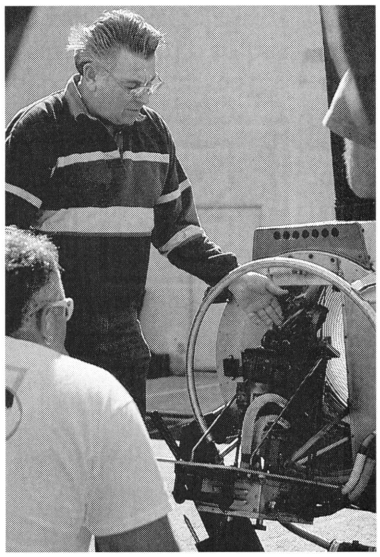
Although the history of the program can be traced back as far as three decades ago, the real changes which brought about its inception began at the 1984 Olympic Games held in Los Angeles. "That was the first time the L.A. city inspectors ever took a really good look at our equipment," explains Ron Dahlquist, one of the key instructors in 728's program. Dahlquist's 35 years in the industry include a stint as chief of the lot at Paramount Studios' electrical department in 1976, as well as part ownership of Keylite Rentals, which was incorporated into Hollywood Rental Company, Inc. several years ago. "It became obvious to the inspectors that the equipment was not up to code," he continues. "In the past, all of our gear had been used in studio environments, not out in public venues. When we went out into the public realm, though, the inspectors started to take a closer look at the type of cables and connectors we were using, and our wiring methods — all of those things became issues. We are also now using practical sets more often instead of simply building them on stages; if we want a restaurant, we go out and rent a restaurant, and that never happened before. When you mix [potentially dangerous] equipment with non-industry people, it creates a whole new set of problems. How do you deal with public venues? How do you wire sets to comply with the code? Even simpler, how do you lay cable so that people don't trip over it?

"With the advent of new equipment such as AC-operated HMIs and so forth, and with the use of three-phase AC power, we ended up with a complete change-over of our equipment. As a result, the codes began to be changed to bring us up to the standards of the electrical industry.

"Not only did we have a

Opposite: Ron Dahlquist explains the DC duce board to students. Supervising instructor Earl Williman (standing third from the left) and CLT Reggie Lake (far left) are also pictured. Left: CLT Tom Nead explains the options and variables in proper power distribution systems. In compliance with 1996 NEC Codes, Nead explained the options in locking connectors, demonstrating both the Cam-Lock and Mole-Lock options.

Better Safe Than Sorry



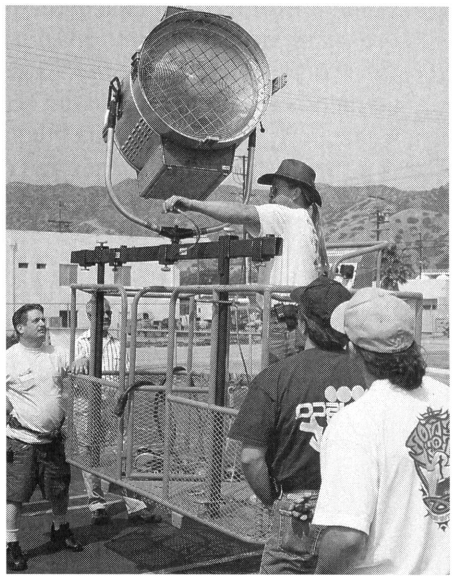
Right: Ron Dahlquist explains the inner workings of a DC carbon arc lamp. Bottom, right: Rigging gaffer Greg Cantrell explains the proper rigging of a Condor basket.

change-over in equipment, but also in personnel. In the past, with the studio system, when technicians first started out they worked on a rigging crew for several years. They never saw a shooting set other than rigging and striking it. That way, they knew the equipment and how to hook it up well in advance of ever getting onto a set — much less to a location. That's the way the system worked. But now that there is no studio system, and each independent production does its own thing, we no longer have a training base, and the need for a training program has really come to the surface."

There are currently four groups of about 35 technicians in the program. Every other Saturday, the groups convene in a classroom at Matthews Studio Group/Hollywood Rental Company. With the support of Carlos DeMattos, the CEO of Matthews Studio Group, and his own firm's management team, Hollywood Rental Company vice president of Kevin Stolpe insisted on creating an educational space within the new facility. He explains, "There were earlier plans to turn that area into a rec room, but I said, 'No. We need a classroom.' The way things are now, some wizard engineer designs a piece of equipment, and then some manufacturer builds it and sells it to a rental company. Soon afterwards, the equipment goes out into the field with no instructions or technical specifications; the equipment then comes back damaged or worse, and guys are getting hurt. There is no schooling for this kind of work. Guys go out to a set and they're told, 'Go rig a 10K on that Condor and put it 50 feet in the air' or 'Go run DC because we're going to have water on that set, but I need an AC outlet here.' A lot of the newer guys just haven't had the experience to know how to do these jobs. With the newer electronic ballasts for HMIs, for instance, if the generator is running three-phase power and there is a dimmer on the same line as the HMI, it can shut that light off because the harmonics going back to the generator cancel out the sync wave, shutting off the ballast. When that happens, we'll get a call in the middle of the night: 'Hey, this 12K doesn't work!' Well, the 12K works fine — it's the situation that wasn't handled correctly, and that comes down to incorrect information. How do we solve that? We teach. When we built the new facility back in May of last year and added the classroom, I went to 728 and said, 'I have a facility for you guys.' They replied, 'Okay we want to do this,' and I told them, 'I will do whatever it takes and give you whatever you need to get this done.'"

"Everyone has been very supportive of this program," adds Williman. "The studios are very, very interested; Universal, Warner Bros., Paramount, and Disney have all given us anything that we needed. They've offered us stage space, even hot stage space. It's wonderful. In addition, Hollywood Rental Company has donated all of the equipment that we've needed for our demonstrations. We've gotten fantastic support from the industry."

The program focuses carefully on the day-to-day problems that arise on sets. In class four, which concerned the use of articulated lifts, the members weren't just shown the proper operation of an aerial lift, but were taken step by step through the actual physical rigging of two different Condors by veteran rigging gaffer Greg Cantrell (*Demolition Man, Batman Forever, Desperate Measures, Star Trek: Generations*). When the lesson was complete, the class members were fully certified in the operation of such lifts. In class two, which covered power distribution, Ron Dahlquist walked the participating technicians to the parking lot behind Hollywood Rental Company, where two different distribution systems were laid out: a DC system running a carbon arc lamp, and an AC run powering a prototype Mole-Richardson 12K Par HMI. "The 12K Par is a perfect illustration of the situation we're facing," adds Stolpe. "Mole-Richardson had just got dropped off four 12K single-ended Pars, and they're going out on rental to someone who's never used them before. These are prototypes. They're going on a truck, off to a location, and the technicians are going to pull them off the truck and say, 'Well, how do I use these things? Do I run single-phase or three-phase? How much amperage do these draw?' The only way to give them this information is to teach them."



transvideo®

The video-assist accessory specialists.

10.4" & 14" Monitors

Show-Biz Expo Los Angeles
June 12-14. Booth # 1520

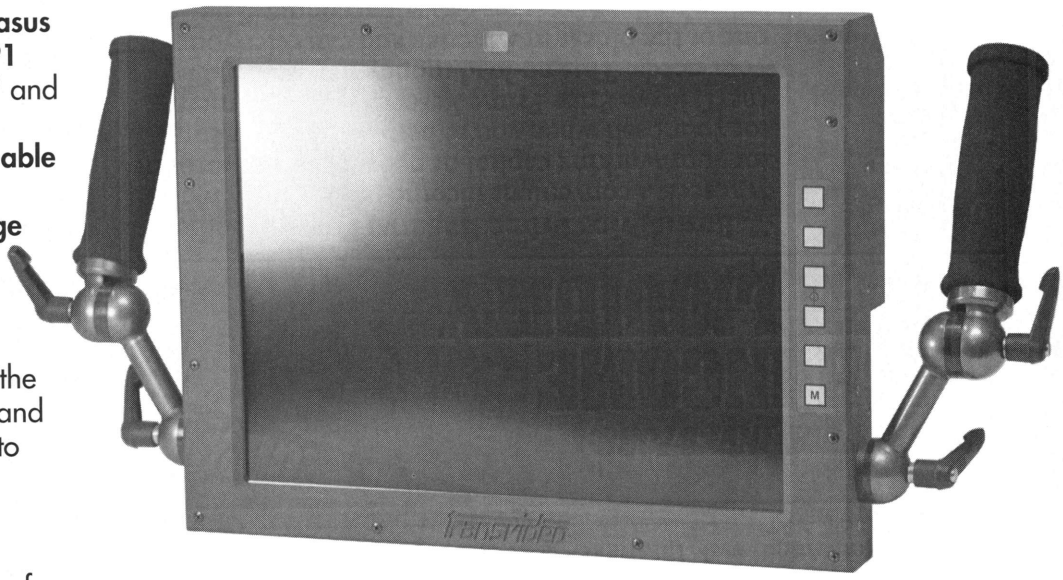
Why Roy Wagner, ASC has chosen Transvideo monitors on his two most recent TV Series:

One 10.4" and one 14" monitors are used by Roy and the Director, while two 6" Cinemonitors are set-up on-board the A camera and on the dolly.

Equipped **with Hermes or Pegasus wireless receivers, and the NP1 battery back** Transvideo 10.4" and 14" monitors become highly portable. **The Director is now able to walk around the set freely holding a 14" monitor package that weighs only 8 lbs** (with receiver and battery).

Thanks to the **Freeze Frame** function it is possible to pause the monitor, walk up to the actors and show them the monitor image to discuss the scene.

Transvideo 14" 6 lbs has an image size comparable to that of a conventional 17" 45 lbs CRT. Transvideo 10.4" and 14" monitors are the only LCD color monitors displaying all three major formats: 4:3, 16:9 and Anamorphic.



Less than 3" thick, Transvideo 14" 6lbs monitor equipped with handles and wireless receiver is becoming a powerful tool for the Director of Photography and the Director.

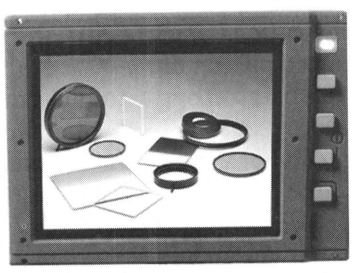
Other Features include:

- 4:3, 16:9, Anamorphic
- NTSC & PAL & SECAM
- Freeze Frame
- Wide off-axis viewing
- Excellent viewing in full sun
- Holds in memory 4 customized settings
- Highly shock resistant
- 12v DC on XLR4

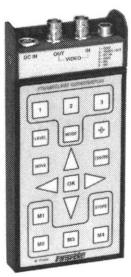
Transvideo also manufactures:

Hermes™ & Pegasus™ Wireless Receivers

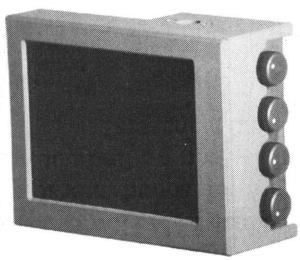
6"Cinemonitor™



Frameline Generator



5" Rainbow™ monitor



BIRNS & SAWYER, INC

1026 N. Highland Ave. Hollywood, CA. 90038
(213) 466-8211 Fax: (213) 466-7049
e-mail: info@birnsandsawyer.com
website: www.birnsandsawyer.com

Better Safe Than Sorry

Accentuating the problem even further, Dahlquist offers, "Even the manufacturers of a new piece of equipment don't necessarily understand the specific application of it. Most of them will send out a new product without even a plug on it and say, 'You decide what to put on it.' We're then left to our own devices to put the equipment together. I think at this point in time, everybody recognizes that education is the key to fixing the majority of the problems we face every day. At the very least, education will ensure a safer workplace." With a laugh, he adds, "If you think education is expensive, try ignorance."

Another inspiration for the Safety First program was California Senate Bill 198, which requires employers to implement safety training in the workplace that comply with Cal/OSHA rules. California Labor Code 6401.7 (a) (1-6) requires an "Occupational Health and Safety Training Program designed to instruct employees in the general safe and healthy work practices and to provide specific instruction with respect to the possible hazards to each employee's job assignment." The code also requires the employee to maintain and keep records to prove that this program is indeed in effect. Obviously, for each individual employer in the motion picture industry, the implementation of a Safety Training Program is impractical, to say the least. Considering today's tight schedules and constrained budgets, it's not even a viable option for each producer to provide proper training for each production. One possible way to stay in compliance with the Labor Code is for the unions to execute and maintain safety training programs.

Another problem that exists in the industry is that set lighting technicians are not deemed "specialty personnel" — despite the fact that they arguably work with the most dangerous components of any set, and often find themselves dealing not only with high voltages (120/240 and 120/208) but with amperages more than one million times the lethal level. In the past, lighting technicians were considered to be "casual laborers." Underwriter's Laboratories, a testing facility that complies with National Electric Code regulations, requires written warnings on selected components that read: "FOR USE BY QUALIFIED PERSONNEL ONLY." If the set lighting technicians dealing with this equipment are merely "casual laborers," then just who are the qualified personnel?

The Safety First program is aimed at eliminating this problem altogether. "After a member completes the six classes in this program, each and every person who

WORLD'S LARGEST
Used Motion Picture Equipment Dealer

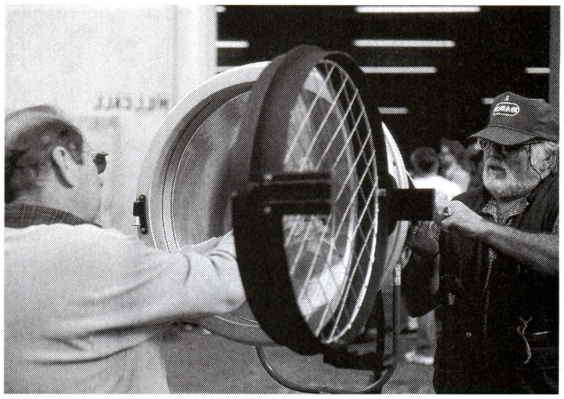
- High Quality
- Huge Quantity
- Buy / Sell / Trade
- Money Back Guarantee

Visual Products
46994 Peck Wadsworth Rd.
Wellington, Ohio 44090 USA

Ph (440) 647-4999 Fx (440) 647-4998
Website: http://www.visualproducts.com
email: visual@ix.netcom.com

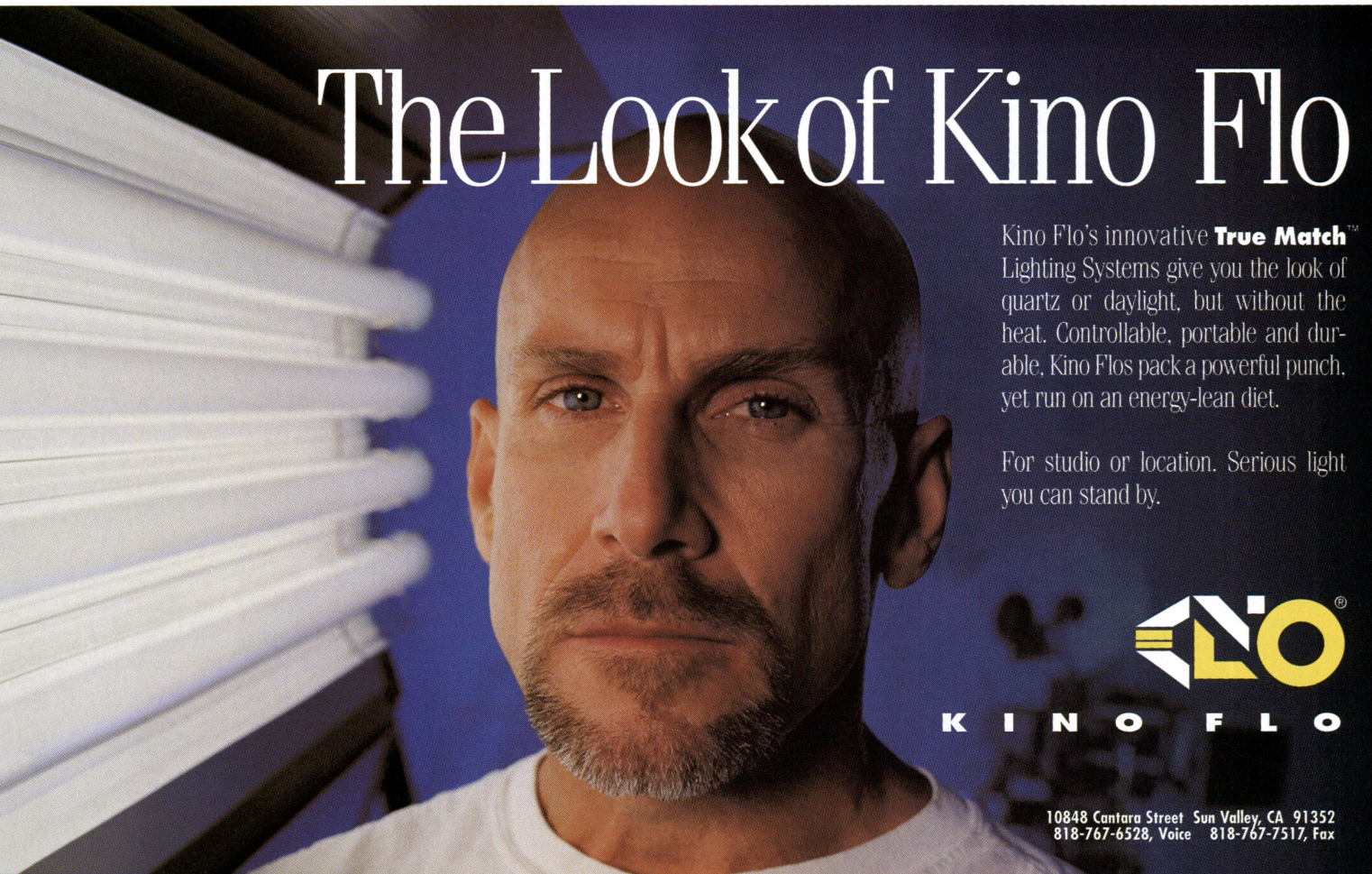
completes the program will have the term 'Safety Qualified Technician' next to their name on the roster," explains Williman. "We handle potentially the most lethal element on the set — electricity — every day. All of the equipment we use requires training. You can't just take someone off the street and say, 'This is it guys, good luck.' Right now, the qualifications for admission into 728 are 30 days [experience on 728 signatory productions] and a high school diploma. At this point, there are no particular guidelines for us to 'qualify' people. Part of this program would be to initiate a mandatory process where a member would work their 30 days, then go through this course, and then join the union. That way, at least we'd have a basis from which to start."

During the course of Local 728's Safety First classes, several manufacturers (including Arriflex, Kino Flo, Mole-Richardson, Sun Ram, PLS, Premire Equipment, Xenotech, High Lux, Mountain Box and, of course, Hollywood Rental Company) have showcased their instruments and explained the inner workings of each piece of equipment. In his demonstration of the Kino Flo products, Michael Holmes imparted some little-known information about the firm's products. "All fluorescent light has flicker," he explains. "The reason why Kino Flo tubes are safe at virtually any shooting speed is that they cycle at 25,000 Hz. This also means that a Kino Flo tube is designed to operate at this 'overdriven' cycle, so if it's placed into an existing fixture with a standard ballast, it will not have the same output and will exhibit a slight green spike. On the flipside, a standard fluorescent tube placed into a Kino Flo instrument will be overdriven by the ballast and exaggerate the already existing green spike."



Supervising instructor Earl Williman and visiting CLT Lee Phillips deglobe the Mole-Richardson prototype 12K Par HMI.

Steve Eichenlaub of Mountain Box Systems demonstrated his new studio greenbed, which is stronger, more lightweight, and designed specifically with 1⅛" sockets to accept junior spuds. Darren Hart and Alex Martinez of Xenotech demonstrated the safe operation of a 2K Xenon fixture, as well as the relamping procedure. They explained that the gas contents within the



100 Years of Experience

New Mexico's film tradition began with cameraman Fred Blechynden shooting Indian Day School for Thomas Edison in **1898.**

30 Years of Service

The pioneering spirit continued with the founding of the New Mexico Film Commission, the first in the nation, in **1968.**

Today, our magnificent light still plays off ancient ruins and sweeping vistas. The only thing to change in 100 years is the increased number and variety of locations and the ease in reaching them. **Come see us at ShowBiz West in LA, Booth 1054 or call 1-800-545-9871.**

100 Years of Filmmaking

NEW MEXICO FILM OFFICE

505-827-9810 • FAX 505-827-9799 • WEB: www.edd.state.nm.us

1898 1998

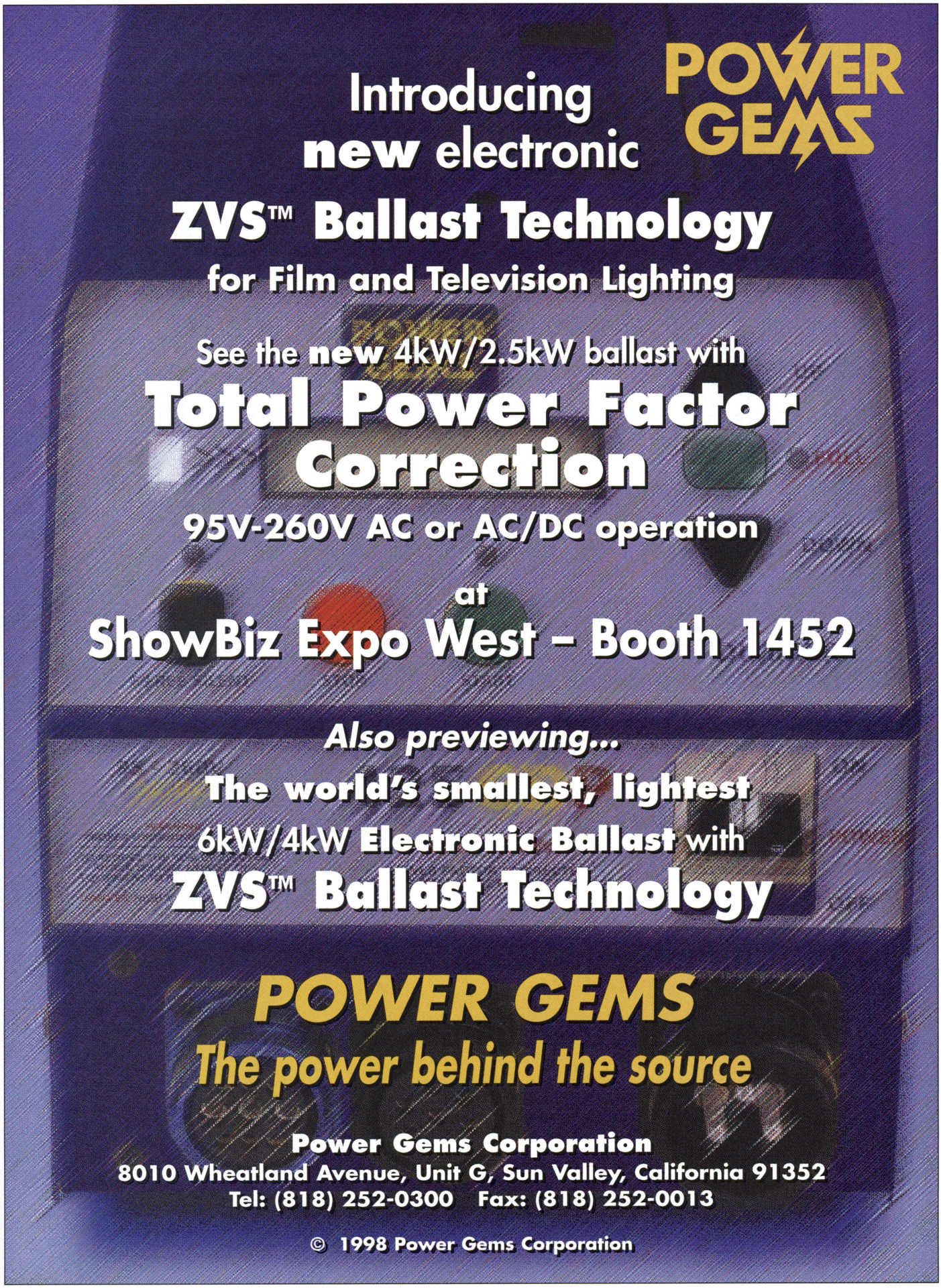
Better Safe Than Sorry

Xenon globe, even at a cold stage, are under six atmospheres of pressure; therefore, any technicians who handle the bare globe must wear a lead safety suit and face mask to protect them from the possibility of lamp explosion.

To further illuminate its participants, the Safety First class notes also present a list of study references, including Harry C. Box's *The Set Lighting Technician's Handbook,* which is given to each new 728 member upon initiation.

One of the members of the first class is veteran first unit and special effects gaffer Reggie Lake (*Crooklyn, Clockers, Girl 6, What Dreams May Come*), who notes that it's never to late to gain more knowledge. "I've got a crew that has amassed a total of about 100 years of experience — I contribute about 31 years to that — and I've still learned things from this class. At the very least, this is a fantastic refresher course. We do this stuff everyday, and after awhile it becomes rote. I picked up a lot here. Even when they're talking about just laying cable — doing it safely and neatly, making sure you have the correct size cable with the proper step-downs and breakouts, making sure that you follow the new NEC rules — the instructors cover a lot of territory. I keep telling everybody I work with, 'Join the class, come to the class.' I think that every member of 728 should participate."

Recent 728 inductee Peter Shultz, who worked through his permit days by rigging on last year's *Boogie Nights* before continuing on to television's *Soldier of Fortune* and now *Profiler,* adds, "It would be interesting to see the program expand to develop a school where maybe every six months they would give a class on specific issues. For instance, the other night on set we were working with the new helium lights, and it would have been really nice to have discussed those here. Sometimes you walk on set and see a piece of equipment that you've never touched


POWER GEMS
Introducing
new electronic
ZVS™ Ballast Technology
for Film and Television Lighting
See the new 4kW/2.5kW ballast with
Total Power Factor Correction
95V-260V AC or AC/DC operation
at
ShowBiz Expo West – Booth 1452
Also previewing...
The world's smallest, lightest
6kW/4kW Electronic Ballast with
ZVS™ Ballast Technology
POWER GEMS
The power behind the source
Power Gems Corporation
8010 Wheatland Avenue, Unit G, Sun Valley, California 91352
Tel: (818) 252-0300 Fax: (818) 252-0013
© 1998 Power Gems Corporation

GITZO 80 ANNIVERSARY

New Gitzo Pro Video System

A Revolution in Portability and Performance

*The **Gitzo 1380 Series Pro Video Fluide Heads** are the perfect support solution for today's new generation lightweight professional video cameras. They feature smooth fingertip drag control with repeatable accuracy, separate pan and tilt control with locks, and a sliding camera platform. Supplied with either a 13.2 lb., 16.5 lb or 22 lb. counter-balance spring for perfect camera support.*

All three new G1380 Series heads are designed with a 75mm ball leveling base which fits perfectly in the new G1337 Aluminum Alloy Video Tripod and new ultra-lightweight G1338 Carbon Fiber Video Tripod.

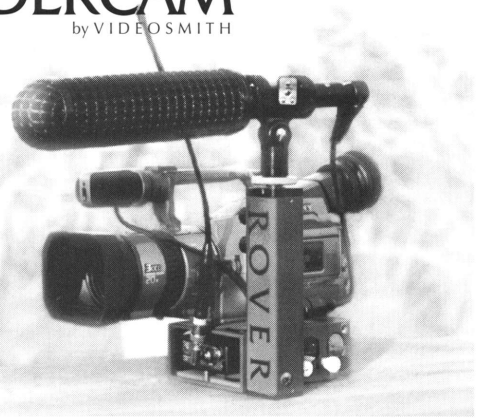
For more information on the G1380 Heads, G1337 and G1338 Tripods, see your dealer, contact us or visit our web site.

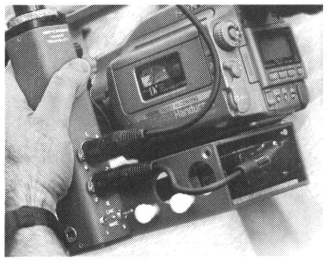
Exclusively **bogen**

Bogen Photo Corp., 565 East Crescent Avenue, Ramsey, NJ 07446-0506
(201) 818-9500 • Fax: (201) 818-9177 • e mail: info@bogenphoto.com • web: www.bogenphoto.com

MIGHTYWONDERCAM
ROVER
by VIDEOSMITH

E-x-p-a-n-d the audio range of your digital camcorder with *Rover*– the unique system for mounting radio and shotgun mikes with *no* fuss, *no* muss and *no* dangling cables. *Rover* turns your camera into a powerful, self-contained video production package.





- Accepts a wide range of radio mikes
- Sturdy handgrip for shotgun mike
- Lightweight, rugged all-metal design
- Handles just like the bare camera
- *Ultimate Rover* comes with built-in BeachTek DXA audio adapter!
- Priced from $199.00

BeachTek
53 Bellefair Avenue
Toronto, Ont, M4L 3T7 Canada
416.690.9457 fax: 416.690.0866
www.beachtek.com

VIDEOSMITH®
100 Spring Garden Street
Philadelphia PA 19123 USA
215.238.5050 fax: 215.238.5075
www.videosmith.com/~vsmith

Better Safe Than Sorry

before, and they don't usually come with instruction manuals."

"This program is a major leap forward," Dahlquist affirms. "It shows that the Local and the producers recognize the need for trained and qualified personnel working in the field. The code is changing to require it, UL is listing the equipment under the condition that it is operated by qualified personnel, and everything is pointing toward the fact that this is industrial-type equipment which should only be operated by experts. We need to make sure that our people meet those criteria. A training program for this industry has been 30 years in the making, but this class has been the first major step. It's a win-win situation for everyone. The producers win because they have qualified personnel out in the field who are getting the job done more efficiently and safely then before. The rental house wins because the equipment isn't getting damaged now that the technicians know how to operate it properly. And above all, the guys in the field win because they know their job better and things are safer and easier for them."

The Safety First program has set an admirable precedent, but proper training is just the first step. Stolpe concludes, "I would love for this program to extend beyond Southern California, to the rest of the United States. I'd like to see some standards set for the entire industry. We're the only industry that can produce equipment and send it out into the workplace without certification. What does this program do for Hollywood Rental Company? You know, it might not do a whole bunch, but it's telling people out there that we care. As a rental company, we care about our industry and about human beings." ■

For further details on this program, guild members should contact Local 728 directly.

On the Spot

A Roll in the Sand

by Mary Hardesty

When director of photography Kevin Ward was selected to shoot two beachside spots for Quincy's Family Steakhouse, he knew that making the eatery's mascot — a yeast roll — look its best would require more than a healthy appetite. Asked how he made a 6'-tall dinner roll appear good enough to eat, Ward responds wryly, "With a lot of backlight."

The first shot of "Big Fat Beach" shows a boy strolling along a picture-perfect seaside with Big Fat, an overgrown Quincy roll. The lad asks his puffy companion which profession he should pursue as an adult, and Big Fat responds that the boy can do whatever he wants, pointing to himself as an example. The roll does admit, however, that there is one drawback to his career: clingy tights.

In the second spot, "Big Fat Birds," the answers to life's great questions takes the twist of a Hitchcockian thriller. This time out, Big Fat and the kid are again strolling along the beach while the youngster inquires about the feeding habits of the shore's wildlife. The scene is sweet and sedate, right up to the moment when it dawns upon Big Fat that, along with many other things, birds eat bread, whereupon, the spot instantly assumes the bent of a thriller.

To create a cinematic veneer, Ward went with odd-angled close-ups. "The Hitchcock look came about as the process started to unfold on the beach," he recalls. "I guess you could say it was a 'hunt-and-peck' way of shooting. We wanted to make the seagulls look as menacing as they did in *The Birds*. [Director] Jim Zoolalian didn't want the humor to be forced, so we constantly underplayed it to allow the absurdity of the situation to speak for itself, down to the ending shot when the yeast roll is seen fleeing for his life."

Notes Zoolalian, "We wanted to make the film look as beautiful as possible to create a weird dichotomy in the images, and when Kevin and I discussed this, it came down to shooting with as much back- and sidelight as possible."

Without the budget for trained birds or bird wranglers, the crew had to rely on bread and luck. "It was horrible," recounts Ward. "The birds didn't do anything we wanted them to do. The funny thing was that the birds were scared of the big yeast roll and didn't want to get too close. It was difficult to get the birds and the roll in the same frame."

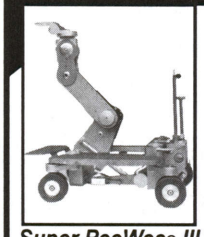
To accomplish this, the cinematographer used a Angenieux HR 10:1 zoom, which gave him the flexibility to adjust his frame during each take. "We would set up on the dinner roll at 40mm and wait for the birds to come in for the wide shot," explains Ward, who backlit the gulls as much as possible to help separate them from the sky. "If the birds didn't do what we wanted, we would go for a tighter shot. As we waited for them to 'act,' we were watching the beautiful sunset and hoping that we'd catch it."

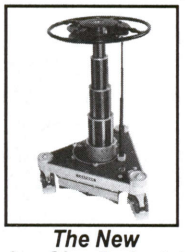
Offers Zoolalian, "Sometimes, during the day, Kevin would see a bird on top of a rock and quickly grab the shot. A lot of those unplanned shots wound up in the finished piece."

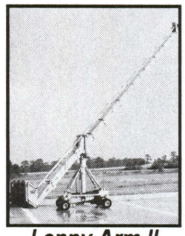
Many of the "rehearsals" also made it into the spot. "When you're working with kids, you just have to keep rolling and do a lot of takes," the director notes. "We did a lot of rehearsals and would slip in a slate just in case. I told Kevin beforehand to keep the camera rolling during rehearsals and after each

Chapman / Leonard
STUDIO EQUIPMENT
MOTION PICTURE AND TELEVISION EQUIPMENT
Time Saving Camera Cranes, Arms, Bases, Dollies, Pedestals and Remote Camera Systems

Super Nova
Titan II
Apollo
Olympian
Sidewinder
Lenny Mini
Lenny Arm Plus
Lenny Arm II
Lenny Arm II Plus
Lenny Arm III
Hot Head
Zeus
Nike
HyHy® Base
ATB I & II
CS Base
Super PeeWee® III
Hybrid I & II
Hustler II
Pedolly® Pedestal
LenCin® Pedestal
Power Pod
TechnoCrane Systems


Super PeeWee® III Camera Dolly


The New LenCin® Pedestal


Lenny Arm II & HyHy® Base

Hybrid II Camera Dolly

Ask about our conveniently located Mobile Crane Locations

Southern California:
USA Toll Free
888 88 DOLLY · 888/883-6559
Northern California:
510/357-1424
Dallas / Fort Worth Area:
USA Toll Free
888 75 TITAN · 888/758-4826
Central Florida:
USA Toll Free
888 33 STAGE · 888/337-8243
South Florida:
305/895-0085

www.chapman-leonard.com

take. The reactions that the kid gave to the dinner roll character after the shots were done were much more realistic than anything we could have told him to do."

Even though these spots were shot during December at Southern California's El Matador State Beach, the atmospheric maelstrom of El Niño did not manage to wreak any havoc. Nonetheless, a backup lighting package and generator were brought in case of rain. Recalls Ward, "We had two days to shoot these two beach spots and another day of shooting on a grassy hill, so we chose the early morning and late afternoons to do all of our wide beauty shots. Fortunately, the early December sun never really gets up into an objectionable angle. It's almost where you would set a key light up. I find winter light to be one of the best situations in which to shoot."

Matador Beach was picked because of its nice rock formations, but while it is a beautiful place which has not been overly photographed, the site is also not very accessible. Ward and Zoolalian had grand plans to utilize a crane and power-pod on the beach shoot, but the lengthy wooden stairway leading to the seashore site forced them to devise alternate ways of shooting. Ward points out, "Jim was planning on using a crane with a remote head to get a Hitchcockian overhead shot, but the only things we could get down the stairs were parallels. Ultimately, everything we used had to be carried down that flight of 120 stairs. The crew built scaffolding on the beach, and instead of a standard dolly, we used a platform dolly on roller skates which traveled on light rail." One of the shots was even done using a Western dolly with partially deflated tires.

Zoolalian recalls, "One of the problems with this setup was that it was basically immobile. And even though we had tide charts, it was still hard to predict where the water would be in our shots. I sent our first A.D., Don Blackburn, out to take tide reports, but unless you scout at the exact time you'll be shooting, there's no way to know the exact position that the tide will be in. You have to make sure your beach location is going to be accessible at the particular time you'll be shooting. We staged our gear at a higher shoreline position so it was ready to go as soon as our site was accessible."

The crew found that eliminating existing footprints and tracks in the sand became an undertaking of nightmarish proportions. Explains Ward, "We tried pouring buckets of water over them and sweeping, but it looked terrible. In the end, we did a lot of restaging. We taped off areas to keep people from walking over the clean sand. For each part of the day, according to where the sun was, we then had a section of pristine beach designated for shooting."

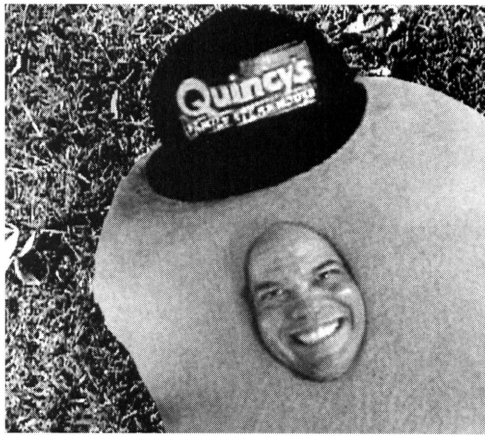
Fortunately, favorable weather allowed Ward to utilize natural light, with occasional bounce fill. "We used a few shiny boards to pick out dark rocks in the background and get a kick off the wet sand, but other than that, no lights were used," details the cinematographer, who photographed the spots with an Arri BL-4. In additon to the Angenieux zoom, his lenses included a Cooke 18-100mm zoom and a set of Zeiss primes.

To enhance the beautiful weather, Ward "would also polarize the sky and sneak in a grad sometimes in the foreground.

"We shot with Kodak's 5245, which also gives dense blacks and saturated colors right off the bat," the cinematographer continues. "It has a narrow latitude, so you're able to achieve good blacks even when you have blown-out highlights in the same frame. It seems that many of the new film stocks have so much latitude that you can't easily achieve that."

Zoolalian notes, "We also did a bit of trickery in post. We'd take a pass of the clean image — with no filtration — and then mix it with a slightly out-of-focus and crushed black-and-white version of the same image. That combination creates a soft edge and makes the highlights bloom, while the blacks remain really dark."

Despite his initial trepidations about this deepened darkness, the cameraman has learned to accept it as part of his overall work. "As time goes



by, I find myself growing bolder and letting parts of the frame go absolutely dark," says Ward. "For a long time, I felt as if I should always be able to see detail. I was scared to allow parts of the frame to fall off into nothingness. These days, I'm lighting in a more contrasty way, and I sometimes put an extreme highlight in another part of the frame. I'm always experimenting with new film and new ideas, which helps to keep my reel fresh." ■

CREDITS

Spots: "Big Fat Birds," "Big Fat Beach"
Client: Quincy's Family Steakhouse
Director of photography: Kevin Ward
Director: Jim Zoolalian
Production Company:
T-minus 30 Films, Venice, CA
Agency: Match, Inc.
Post facility:
Pacific Ocean Post, Santa Monica, CA

New Products

compiled by Andrew O. Thompson and David E. Williams

New Steadicams and Telecine

The Cinema Products Corporation recently exhibited their two latest incarnations of the Steadicam and a new telecine system.

The first Steadicam model is the DV (seen here with a Canon XL1), a professional, handheld unit designed specifically for the new

generation of of digital video camcorders. The DV can be used with virtually any 2- to 6-pound camera and offers the same fluid motion capability as previous Steadicam models. Weighing in at about 2.5 pounds, complete with its active matrix color LCD monitor, the DV features a patented gimbal design, an ergonomic handle grip (interchangeable with the Sony GP-TRX grip), a precise lead screw stage, and a quick-release system.

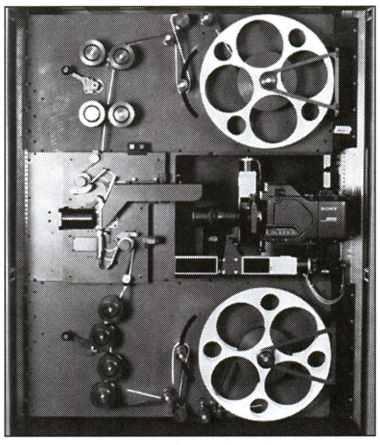
Cinema Products designed the DV to be used for shooting multimedia, events, weddings, industrials and documentaries, offering the videographer a low-cost opportunity to take advantage of an advanced camera stabilization system.

The second new Steadicam model is the ProVid 2, a streamlined version of the ProVid featuring carbon-fiber construction. The ProVid 2 is intended for use with 8- to 19-pound video cameras and is completely modular to permit additional and upgraded components.

Upgrade options include a dual-action Iso-Elastic arm, a high-performance 4" green-hued monitor offering 4:3 aspect ratio, and a telescoping post. The upgraded vest includes a reversible bridge for operating on the left or right side, and a unique adjustable angle of lift that allows the operator to change the position of the arm to an individual operator's preference.

The company's new real-time telecine is the CP Telescanner, which combines the slew-speed flexibility of a telecine machine with the pin-registered accuracy of a traditional film scanner.

Key to the Telescanner's design is its independently actuated, full-fitting register pins. Utilizing magnetostrictive pin-actuation technology, the machine achieves optical printer film registration accuracy of 0.0002" at speeds ranging

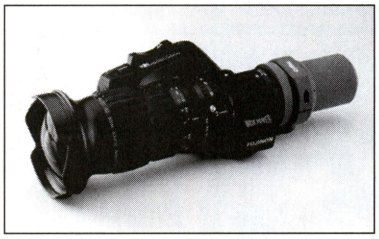


from 0 to 60 fps. The transport system is driven by a sprocket on the shaft of a high-torque, low-inertia DC motor, which permits the Telescanner to achieve precision pulldowns of 2, 3 or 4 perforations at 24, 30 or 60 fps. The system can fast-forward or rewind at up to 600' per minute.

The Telescanner comes equipped with a Sony HDC 750 high-definition camera which initiates pulldown for a a clean 2-3 real-time transfer at 24, 30 or 60 fps. The HDC 750 also outputs down-converted serial digital component 525 - line video. Using ferro-electronic LCDs, the color-additive lamphouse provides color correction and electronic shuttering to match the pulldown requirements.

The system is also designed to accommodate any other image-capture format, including flying spot scanners and digital cameras.

Cinema Products (310) 836-7991, (800) 311-2463. website: www.steadicam.com.



MiniCam

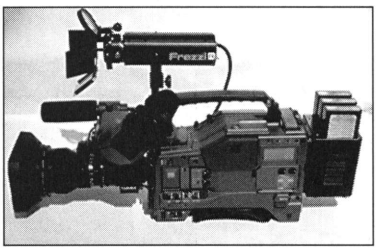
Optex announces the launch of the B413 PAL/NTSC 700 line miniature camera for international distribution. This unit is a sister camera to the TU48/40 mini-cube camera and is adept for outside broadcast, medical use and specialized areas such as in-car use at motor racing circuits. The B413 utilizes three ⅓-inch CCD chips in conjunction with the B4 lens mount as used by Sony, Panasonic and JVC. This allows broadcasters to employ any B4 mounted zoom lens (from wide-angle to telephoto) on a true miniature camera without the need for additional expenditure on lenses. Additionally, the camera offers the advantage of an extended zoom range, particularly when coupled with a 20x or 30x lens. This compact camera is just

THE BodyCam™
Operator
Ted Popov
Unrivaled Range and Adaptability
Views Unobtainable Any Other Way
Amazingly Smooth Gliding Camera Work
bodycam@hotmail.com
Pager / Voicemail: 626-456-5299

SUPER 8 SPECIALISTS
ONE STOP FOR PROFESSIONAL SUPER 8
*PAL NOW AVAILABLE
*ALL SUPER 8 STOCKS
*RUSH PROCESSING
*RANK TRANSFERS
*BEAULIEU EQUIPMENT
*RENTAL SERVICES
TRY OUR NEW SUPER 8 COLOR NEGATIVE FILM!
Super8 SOUND
LOS ANGELES 818-848-5522
FAX 818-848-5956
INTERNET: www.Super8Sound.com

95mm long, making it ideal for remote mounting in studios or on location.

OpTex 44 (0) 181-441-2199, fax 44 (0) 181-441-2199, e-mail: info@ optex-tint.com.



Mini-Arc and Battery Box

Frezzi Energy Systems unveils its full-spectrum 50-watt "mini-arc," which provides the equivalent of 200W quartz light in a portable, compact design. By drawing only 65 watts, this unit offers improved efficiency over traditional lighting. The fixture is color-corrected, comes with an optional indoor filter and barn doors, operates from any 12-, 13- or 14-volt battery and has an estimated 4,000-hour lamp life.

The company's "hot swap" battery box (NP1-3P) permits camera operation from three independent NP-1 batteries simultaneously. The unit mounts easily to one's existing snap-on bracket — like a brick battery — but weighs only an additional 3.5 ounces. The hot swap features dual purpose LEDs which flash green (to indicate power consumption) and red (to alert users of low battery power). When one battery is low, it can be replaced by a new one without interrupting a shoot for battery replacement. The battery weight can also be adjusted by selecting 1,2 or 3 batteries according to the shoot's needs.

Frezzi Energy Systems, (973) 427-1160, fax (927) 427-0934, e-mail: frezzi@frezzi.com.

New Cooke Lenses

Clairmont Camera now offers the Cooke S4 prime lenses, which are designed to have better resolution, be quite resistant to internal flares, and have improved exposure density or vignetting from the center to the edge of the picture. Spherical aberrations are kept to a minimum so that only one

witness mark is needed on the lens barrel for each side. Cams are used for focusing instead of helical threads, providing more user-friendly spread on the focus scales.

Less torque is required for focusing regardless of the temperature because the focus barrel turns on caged ball bearings. There is no metal-on-metal contact with grease in between, thus eliminating the problem of the fluid becoming thick in cold climes.

The focus and iris gear on each lens is the same diameter and is at the same position. The lenses themselves are all the same diameter — 105mm inside and 110mm outside. There is no mechanical change in length during focusing, making for an easy fit to a matte box; space is also provided for tape alongside the focus scales which permits the focus puller to be able to mark focus points conveniently.

All Cooke S4 lenses are relatively close-focusing. For the lenses currently available, their closest focus marks and weights are as follows: 18mm - 8⅔" at 4lbs.; 25mm - 8⅜" at 4lbs.; 32mm - 11⅝" at 4lbs.; 50mm - 19¾" at 3lbs 6oz.; 75mm - 25¼" at 4lbs. 2 oz.; 100mm - 24¼" at 4lbs. 12oz. The S4 lenses are perfectly color-matched to each other as well as to the Cooke zoom lenses. Each Cooke S4 lens is a true T2 available in PL mount.

Clairmont Camera, (818) 761-4440, fax (818) 761-0861.

Digital Fluid Head

Sachtler's DV 12 fluid head features a fluid-damping and a 5-step counterbalance system that is fully compatible with modern digital ENG cameras. The DV 12 can cope with one payload and handles any camera between 7 and 12 kg (15 - 27 lb.). The finely tuned counterbalanced system

© 1998 Bill Westheimer

Code: G27

Acquire new insights and spark your imagination at *Variety's* ShowBiz Expo Events

You'll find all the tools, techniques, and technologies you need to stay on top of the film, video, broadcasting, corporate video, music video, new media, theatre and theme park areas.

ShowBiz Expo Los Angeles
Los Angeles Convention Center
June 12 - 14, 1998

ShowBiz Expo New York
Jacob K. Javits Convention Center
September 17 - 19, 1998

Reed Exhibition Companies
383 Main Avenue
Norwalk, CT 06851

Reed Exhibition Companies
Delivering Business Contacts

To find out more about the ShowBiz Expo Events, contact us at:

Call 800 - 840 - 5688
Fax 203 - 840 - 9688
http://showbiz.reedexpo.com

For exhibitor information call:
203 - 840 - 5888

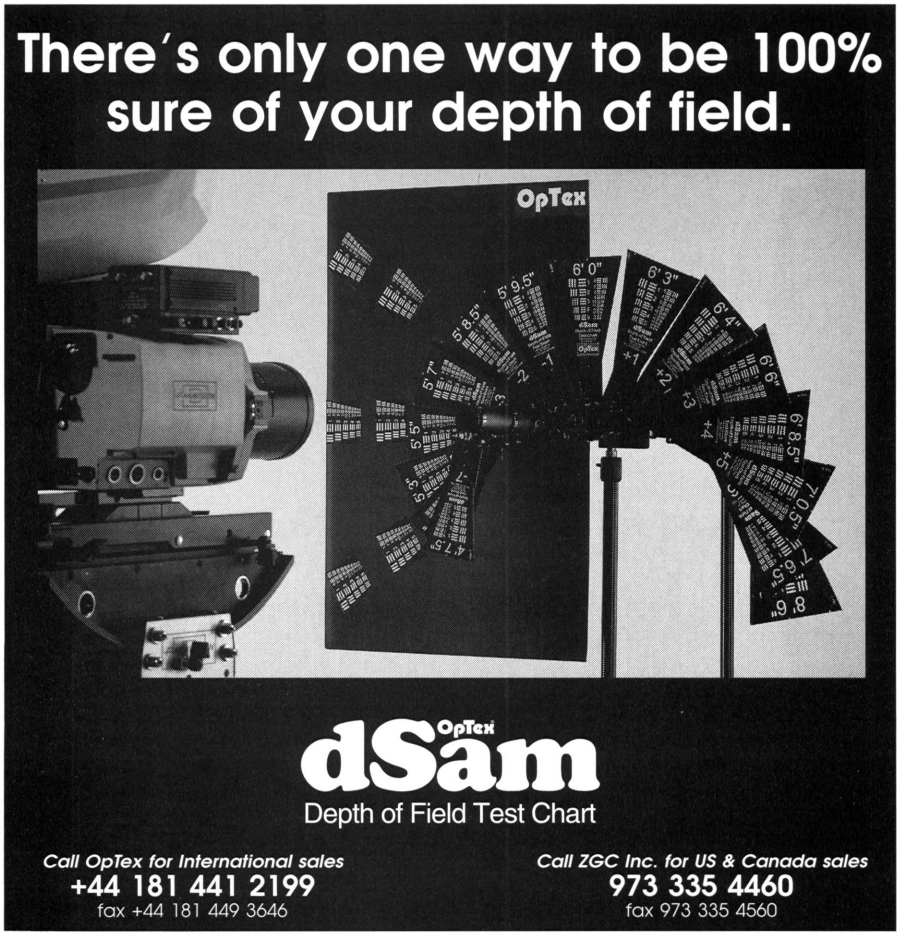
ARRI 535A ARRI 535B ARRI 435ES ARRI 435MS
MOVIECAM COMPACT ARRI 16 HSR 3
AATON XTR PROD SHIFT & TILTS
VARIABLE PRIMES STEADICAM
PANTHER POWER POD

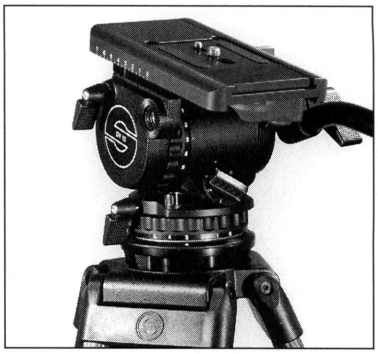
Working on Your Image!

BOSTON CAMERA RENTAL COMPANY

1170 Commonwealth Avenue
Boston Massachusetts 02134

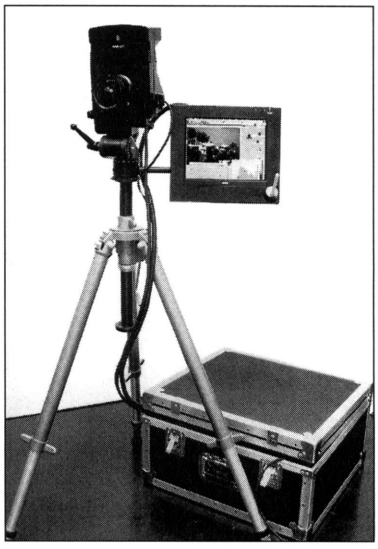
Telephone 617.277.2200 Fax 617.277.6800





means that small changes in camera weight — such as adding an on-board camera light — can be smoothly and quickly balanced. The unit also features Sachtler fluid-damping as well as the Touch & Go camera lock with sliding balanced plate. The DV 8 has a weight capacity of 10 kg (22 lb.) and can support a 7mm ball fluid head.

Sachtler (49) 89-32-158-241, fax (49) 89-32-158-227.



Digital Camera

Sinar announces its mobile digital camera, in which the conventional computer monitor has been replaced by a flat LCD touchscreen monitor. Instead of a mouse, a magnetic stylus is used to make the camera settings directly on the flat monitor. A new accessory is a transformer which can be connected to a car battery so that the mobile camera can work independently of public electricity mains.

The features and advantages of this camera are identical to those used in a studio: convenient handling as a

UCLA EXTENSION

Entertainment Studies

Train with Top Professionals

Summer Quarter 1998 Courses

New this Quarter

Producing Visual Effects On a Limited Budget

Visual effects are mandatory for some film and television genres, and an increasingly "invisible" part of all productions. Until recently, the cost of producing high-quality visual effects limited their use to high-budget projects. This limitation now has been eliminated with today's microcomputer software.

Designed for visual effects artists as well as cinematographers, editors, production designers, art directors, and producers, this course presents an overview of the process of producing visual effects on a limited budget. Participants will expand their knowledge of terminology, technology, and budgeting for special effects.

Lectures, discussion, guest speakers, case studies, and workshop assignments are presented by **Evan Jacobs** and **Craig Talmy**. Mr. Jacobs is the co-founder and executive producer for Vision Crew Unlimited, a visual effects company that has produced effects for *Mortal Kombat: Annihilation* and *Titanic*. Mr. Talmy is a visual effects producer, supervisor, and technician, whose credits include *Species, Batman Returns*, and *Beetlejuice*.

Thursday, 7–10 pm, July 2–September 17 UCLA: 146 Dodd Hall
Fee: $465 **R**eg# V1071R

Also Offered Summer Quarter

NEW MEDIA

Digital Image Creation

A one-day seminar for anyone who needs to understand how digital effects fit into the production process:

- **Digital Backlot: An Introduction to Digital Image Creation for Film and Television**, Debra Kaufman, a freelance writer whose focus is digital effects in the entertainment industry
- **Workshops in digital image creation using Matador and Alias Power Animator**
- **Workshops in computer modeling, animation, and CAD held at the UCLA Extension/IBM Media Lab**

FILM, TELEVISION, AND VIDEO

Directing

New Course

- **The Director's Director: A Day with Andre de Toth**, a filmmaker for 70 years whose directing credits include *House of Wax* in 3-D and uncredited second unit director on *Superman* and *Lawrence of Arabia*; moderated by **Robert Koster**
- **Directing Actors for Film and Television: A Scene Study Workshop**, **Robert Thompson**, Emmy and Academy Award-nominated producer; directing credits include *Silk Stalkings* and *Hill Street Blues*

Production

New Course

- **Maximizing the New Technologies for Filmed Entertainment**, Frank Dutro, Project Manager, and **Alan Lasky**, Solutions Architect, Silicon Graphics' Professional Services Film Practice
- **The Art of Animation: An Introductory Workshop**, **Sharon Wu**, filmmaker whose work in animation has been screened nationally and internationally

New Course

- **The Producer on the Line in Film Production: A Master Class with Michael Gallant**, producer/production executive whose credits include *Final Descent, War and Remembrance*, and *The Day After*
- **The Craft of the Second Camera Assistant**, **David Kenig**, Manager, Technical Operations, Panavision Hollywood
- **Cinematography II: Visualization and Exposure**, **Earl Rath**, ASC, director of photography
- **Basic Lighting for Film and Video**, **Fred Martin**, director of photography whose clients include HBO and The Disney Channel, and **Chris Tallen**, director and director of photography whose clients include Dick Clark Productions and GTE
- **The Role of Editing: Shooting and Editing Dramatic Films**, John Bragin, John Bragin & Associates, Visual Media Design and Production

FILM THEORY, HISTORY, AND APPRECIATION

- **Creating Entertainment as Art: The Media Maker's Challenge for the 21st Century,** Martin Isaacson, MEd, art and media consultant

To enroll with VISA, Discover, MasterCard, or American Express call **(310) 825-9971** or **(818) 784-7006.**

For more information call (310) 825-9064. Outside Southern California call (800) 825-9064. E-mail—espa@unex.ucla.edu

Web site—www.unex.ucla.edu

HL B71

compact camera with clear operation aided by software and a monitor screen, free choice of light sources and a complete selection of lenses that also includes an extreme wide-angle lens and even a high-quality zoom lens. The camera can also be employed in a hybrid configuration, meaning that it can be used for digital as well as traditional chemical photography. By attaching it to a Sinar p2 camera with an adapter, the unit becomes a digital camera with all of the adjustment capabilities of a view camera. A precise system of asymmetrical swing-and-tilt axes with the two-point focusing technique permits convenient and accurate operation.

Sinar, (41) 0 52-647-0756, fax (41) 0 52-647-0756, e-mail: pr@sinar.ch.

Automated Pan-Tilt Unit

Directed Perception introduces the model PTU-46-17.5 pan-tilt unit, which moves at speeds over 300 degrees per second while maintaining precise position control of 3.086 arc-minute (0.051 degrees) resolution. The unit offers higher resolution at 0.771 arc-minutes with a rated load capacity of 6 lbs. and top speeds of 60 degrees per second. With all-metal gears and construction, these pan-tilts are rugged and radiation-hardened; weather-protection options are also available.

Host computer usage is simple via plug-and-play with an RS-232 terminal. For programmed control, binary commands provide compact and efficient control communications. Built-in RS-485 multidrop network capabilities allow a single host port to control up to 127 pan-tilt devices.

Microprocessor control and constant current bipolar drives provide efficient high-speed movement, and hosts can make on-the-fly position and speed changes to support both position and velocity servo control. Standard ¼-20 mounting is provided, and the mounting plate can be removed for easy customization.

Measuring 3" x 5.11" x 4.25," these pan-tilts offer flexible power options and improved power management features that make them ideal for battery-powered applications. Host commands control power consumption: 16W peak at full power, 7.5W peak at low power, and 1W peak with motors off. Mechanically designed with batteries in mind, the unit can hold position with motors off for lighter loads. The

Professional Courses for Professionals

Professional CINEMATOGRAPHY

COURSE SERIES

One-week intensive workshops starting this May on the state-of-the-art sound stage of the School of Image Arts, Ryerson Polytechnic University, Toronto, Canada, and at the headquarters of William F. White Limited, the world's largest supplier of camera, lighting, grip and related production equipment.

- May 3-9 Camera Assistant
- May 3-9 Advanced Cinematography
- May 10-16 Camera Operator/Advanced Camera Assistant
- May 10-16 Advanced Lighting for Film & Video I
- May 17-23 Advanced Lighting for Film & Video II
- Learn with the latest state-of-the-art camera, dolly, crane, grip and lighting equipment
- Series recommended by IATSE and Society of Operating Cameramen
- Courses taught by Torben Johnke, ASC, and other award-winning cinematographers

On-campus accommodation available. Courses are also held in September and February.

Fax or e-mail for complete course information.
For more information, phone (416) 979-5180, fax (416) 979-5277,
e-mail profcin@acs.ryerson.ca Web site www.ryerson.ca/ce

WILLIAM F. WHITE LIMITED
MOTION PICTURE, TELEVISION & THEATRICAL EQUIPMENT SUPPLY
VANCOUVER • CALGARY • TORONTO • OTTAWA • MONTRÉAL • QUÉBEC CITY • HALIFAX
AFFILIATES: WILMINGTON, NC • BUDAPEST, HU

RYERSON

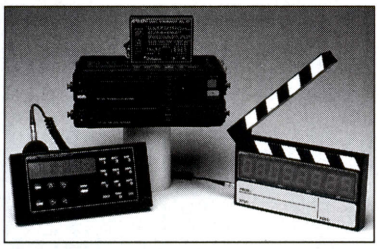
Offered by the School of Image Arts and the Continuing Education Division of Ryerson Polytechnic University, in partnership with William F. White Limited.

CONTINUING EDUCATION DIVISION RYERSON POLYTECHNIC UNIVERSITY **SCHOOL OF IMAGE ARTS**

PTUs accept 11-38VDC unregulated, and overvoltage and reverse polarity protection is provided.

The unit's options include international AC/DC power supply, joystick interface, nodal adapter, weatherizing and C-language programmer's interface.

Directed Perception, Inc. (650) 342-9399, fax (650) 342-9199, website: www.DPerception.com.



A Slew of Slate Equipment

Ambient Recording now offers a complete slate setup, including clockit portable time code equipment. All units are driven by a very accurate Xtal, which can be calibrated in the field. The unit has under one frame a day drift between boxes. All of them can now be calibrated using the GPS Universal satellite time with a Trimble GPS unit with SMPTE out.

The lockit box is a compact timecode and video sync generator used as an accurate timecode and sync signal source. It can be used for eliminating drift between recording machines on location — for example, with Betacams and DAT recorders in multi-camera situations.

The master-slate is comprised of a time-code slate with comprehensive generator and reader modes. Simple error checker displays error in time code between master slate and external code. Other features include strobe bars and nine brightness steps.

The controller is a universal master clock and calibration device for all clockit units. It identifies code error to 1/100 frame and can determine its Xtal to external code, allowing other clockit units to be calibrated to the time-code generator of a film camera — a function that is applicable at all frame rates.

The clockit sync module for the HHB Portadat is an internally fitted PCB with external interface with clockit crystal genlocks that increase accuracy. A built-in second TC generator allows real time insertion in userbits. Event numbering is also possible thanks to new software in the module allowing insertion of an event number in the time code of the Portadat. This event number is incremented when the machine goes to record (or by pressing the DAT ID number) and is unique for each take, identifying the recording in time code.

Ambient Recording, 49 (089) 651-8535, fax 49 (089) 651-8558.

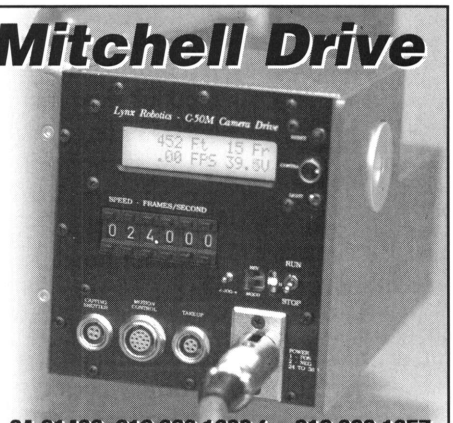
Tripod Support Surface

Spider Support Systems — makers of the Spider Pod tripod riser and standing platform — now provide an Expansion Web for their product. This apparatus allows for a wider yet stable standing platform area when used in tandem with the Spider Pod. It features the same compact design found in the

The Ultimate Mitchell Drive

All Speed Crystal Motor for GC's, Standards, Mark II's & Fries 35R

- Every Film, Video & HMI Speed from 0.000 to 128.00 FPS
- Settable & Accurate to 1/1000 FPS
- Intelligent, programmable readout
- Exclusive, non-slip motion control interface



Lynx Robotics, 6827 Valjean Avenue, Van Nuys, CA 91406, 818.989.1622 fax 818.989.1257

POGO CAM

THE ALTERNATIVE
Body Support System

GEO FILM GROUP
7625 Hayvenhurst Ave. #46
Van Nuys, CA 91406
818-376-6680 ■ FAX 818-376-6686

POGOCAM "Captures the Action"

35 MM REFLEX

The Fries model 435 is a new general purpose MOS production 35mm camera. With its optical printer compatible register pins, steadiness and 150 FPS speed. The 435 is ideally suited for special effects, commercials or any photography where a quality steady image is desired.

The 435 is a spinning mirror reflex camera with a 170 degree blanking shutter. The internal 30VDC motor runs the camera from 2 to 150 FPS forward and 2 to 50 FPS reverse, in one frame increments all crystal. The camera is equipped with take-up and supply torque motors.

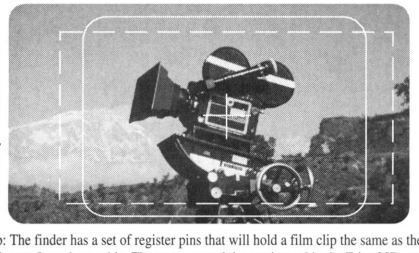
There are both 1000 ft. and 400 ft. displacement type magazines. A new feature is the light valve which allows the operator to direct all the light to the viewing system, or to the video assist, or combo which splits the light between both viewing and video assist.

35 mm, Reflex Camera

WHY NOT SEE THE WHOLE PICTURE?

The new Fries Director's Viewfinder allows the director to view the full camera aperture .980 x .735, thru the same lenses that will be used on the camera when filming. Why aren't you getting the whole picture?

Ground Glass 1.85 & T.V. on Academy Center line shown



Film Clip: The finder has a set of register pins that will hold a film clip the same as the Fries camera.
Groundglasses: Interchangeable. The same groundglass as is used in the Fries 35R and 35R3 cameras.

Director's Viewfinder

fries Engineering

Fries Engineering designs and manufacturers special effects cameras and conversions in 35mm, 65mm and Vistavision including high speed, time lapse and motion control.

8743 Shirley Avenue, Northridge, California 91324 Phone 818-998-5400 FAX 818-998-7553

Spider Pod, allowing for easy setup and travel. The modular 2' x 2' squares can be configured to surround the Spider Pod, and allows a chair or stool to be placed on the platform, while ensuring the same shake-free operation found with the Spider Pod. The expansion platform provides ample room for the camera operator, even when using a studio configuration. The Expansion Web works with all existing Spider Pods.

Support Systems, (703) 212-8200, fax (703) 212-8461, website: www.spidersupport.com.

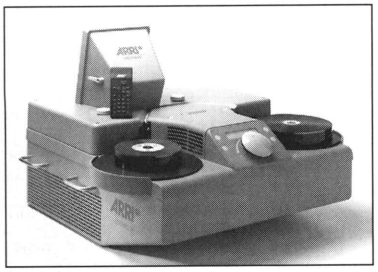
Video Projection System

Digital Projection announces the Power 5gv (graphics/video) projector, a large-screen presentation, entertainment and multimedia projection system engineered to enhance computer-based graphics and visuals. The Power 5gv is a second-generation machine based on Texas Instruments' advanced Digital Light Processing (DLP) technology and features a three-chip Digital Micromirror Device (DMD) design with a native resolution of 1024 by 768 pixels.

While Digital Projections' previous Power displays featured more than 500,000 micromirrors per DMD chip, the new 5,000 ANSI-lumen Power 5gv utilizes nearly 800,000 micromirrors per DMD chip to reflect even greater amounts of light. The result is a 60 percent increase in resolution, and higher light output.

Also new to the Power 5gv is an advanced resizing engine capable of managing resolution sources; improved power supplies that reduce onscreen visual noise; and a built-in control keypad for local control of the projector.

Digital Projection, Inc., (770) 420, Fax (770) 420-1360, website: www.digitalprojection.com. ➢



Portable 35mm Projection and Lighting

The Arriflex Corporation recently demonstrated the Locpro 35, a multipurpose 35mm positive/negative film projection and video transfer system designed for location, studio and conference use. The device is lightweight, compact and simple to operate. The Locpro 35 features a switchable mirror system for wall projection or video image. The video image is created through the use of a built-in ⅓" CCD color high-resolution camera. The projector's operating speed ranges from single-frame to 60 fps, and the film can be advanced by 200 fps forward or reverse via a high-speed shuttle mode. The Locpro 35's high-precision film transport provides accurate picture steadiness at better than 0.002 percent of picture height. An additional aperture opening at the edge of the film gate reveals the film perforation for steadiness comparison of the image.

A 400W, 24v HTI lamp and f2 50mm lens provides a bright image of more than 6' in screen width with an average color temperature of 5,400°K. Image brightness and flicker-free projection ensure the best possible image evaluation.

The Locpro 35 accommodates 1,000' platters and is useful for checking focus, contrast, color and overall film image quality. However, it can also be used as a video-transfer device. PAL (460-line) or NTSC (470-line) video can be recorded from the 35mm film image or digitized into an offline digital editing system for immediate location film editing. For viewing/recording dailies with sound, the Locpro 35 can also be synchronized with a DAT machine or (via an audio sync unit) with various magnetic film players.

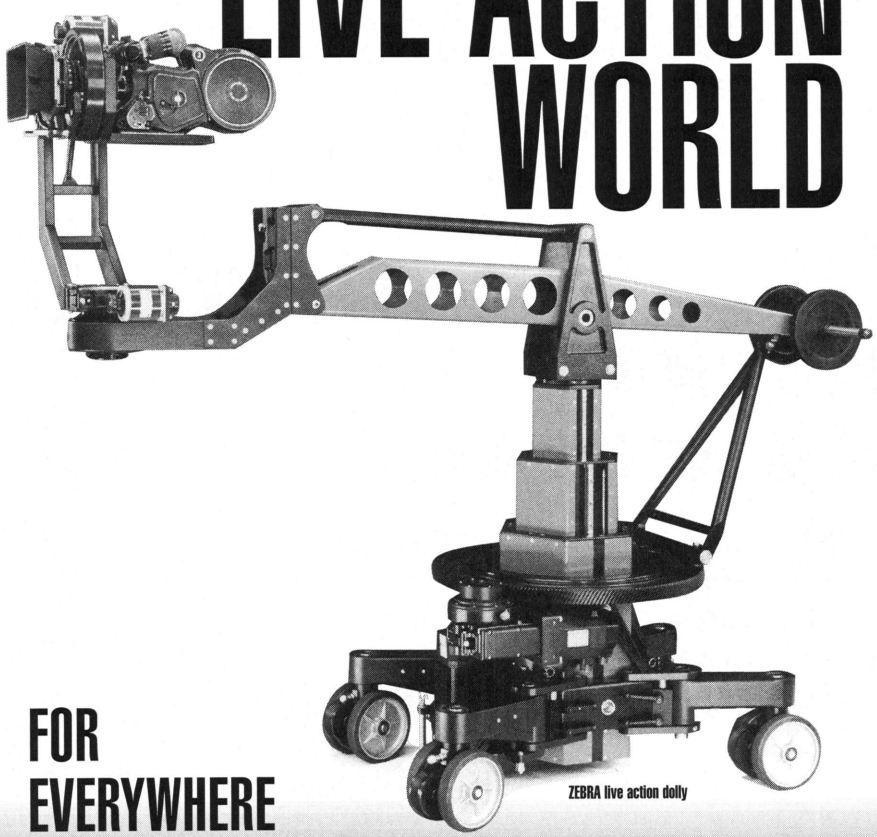
Arri has also recently introduced a wide variety of new HMI and tungsten lighting kits. Arri offers more than 20 portable lighting kits, bringing studio-quality lighting and control to field production. Combinations include HMIs, Fresnels and Chimera lightbanks. Rugged cases on roller wheels make moving a fully loaded kit easier than ever. All kits are complete with lamps, scrims and stands. Most kits include an accessory pack with extension cord, lamp pack, gloves and clothespin.

Arriflex Corporation, (914) 353-1400, Fax (914) 425-1250; (818) 841-7070, Fax (818) 848-4028; website: www.arri.com; e-mail: Lighting@arri.com.

Plasma Video Display

ShibaSoku Corp. of America now offers its Executive Suite Series ES42 42"-diagonal color widescreen plasma video display. The thin-profile 16:9 screen is only 3½" in thickness and

Motion control for the LIVE ACTION WORLD



ZEBRA live action dolly

FOR EVERYWHERE ELSE • GAZELLE • GRAPHLITE • FIELD RECORDER PACKAGES • MITCHELL FRIES 35R3s • DIGITAL VIDEO RECORDERS • STAGES

MOTION CONTROL RENTAL SERVICES
Phone: (818) 781-2084 Fax (818) 781-4695
mcrs@pacbell.net http://www.motioncontrolrentals.com

allows a 160-degree optimum viewing angle (both vertically and horizontally) with 852 x 480 pixel resolution. The display offers a 400:1 contrast ratio and more than 200 Cd/m^2 brightness. The ES42 can handle multiformat inputs, including VGA, RGB/component, S-video, composite (NTSC/PAL), YPbPr (HD) and YUV (NTSC). The unit also has an IF remote, a gamma compensation circuit, and shelf, wall, floor, or ceiling mounting options.

ShibaSoku Corp. of America, (310) 672-6765, (800) 423-6347, fax (310) 672-3665.

Digital Video Tripods

Miller Fluid Heads recently introduced the DS-5 and DS-10 tripod heads, which were designed specifically for DV format camcorders. Both are alloy die-cast fluid heads with 75mm ball leveling, complete with lightweight alloy tripods, detachable above-ground spreaders, rubber feet, and pan handles. A custom soft case is also available.

The DS-5 counterbalance was designed for use with Sony's VX-1000, SC-100, DCR-PC10 and TRV7; Canon's DM-XL1 and DM-MV1; Panasonic's EZ-1; and JVC's GR-DVXPRO. The above cameras each weigh between 1.5 and 5 pounds.

The DC-10 boasts a payload capacity of 10 lbs., and can support Sony's DCR-VX-9000, DVCAM and DSR-200 DVCAM. The DS-10 is available with the choice of two camera plates to handle broadcast mounts with ¾" and ¼" attachments, and semi-pro mounts with ¼" locating pin attachment.

Both the DS-5 and DS-10 offer the same control features, fluid drag design, and accessory list as Miller's larger broadcast/EFP products.

Miller Fluid Heads, (973) 857-8300, fax (973) 857-8188, website: www.miller.com.au.

Advanced Film Recorder

Celco now offers the eXtreme Nitro film recorder, featuring advanced CRT technology. The eXtreme Nitro can utilize Eastman Kodak's EXR 5244 color intermediate stock, any motion picture camera stock, and Kodak's 5234 fine-grain duplicating panchromatic negative film for the creation of black-and-white separation masters. The Nitro can also image directly to these stocks in the 16mm, 35mm and 65mm formats.

NALPAK offers the most...

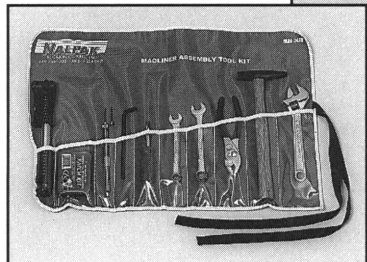
EXTENSIVE LINE OF MAGLINER TRUCKS AND *EXCLUSIVE* ACCESSORIES.

Introducing the **DUAL-8 Conversion,** featuring the "*No chop - saw design*"!

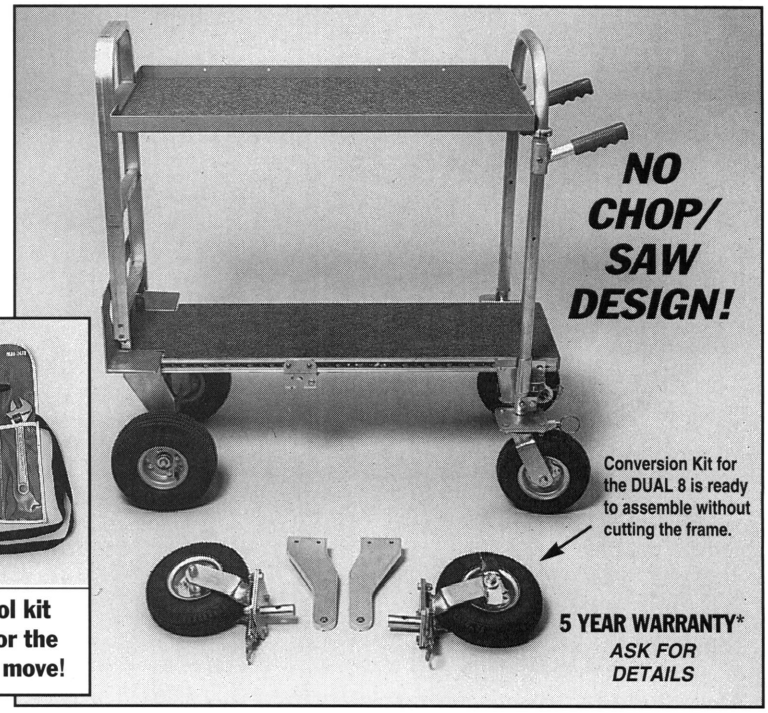
All Nalpak conversions are "nut-n-bolt" designs which eliminate any permanent alterations to your Magliner.

All trucks (Yeah, even this one) fold down for easy transportation and storage.

Heavy duty design ensures this Magliner conversion will handle any job!



Check out the new tool kit offered by *NALPAK,* for the Magliner owner on the move!



Send for Nalpak's exclusive full color Magliner brochure

NALPAK

NALPAK SALES, INC. 1937-C Friendship Drive, El Cajon, CA 92020
Tel: 1-888-4-TUFFPAK - Fax: 800-4-NALPAK, Web site: http://www.nalpak.com/nalpak

The Nitro's use of an unlimited-life magnetic field system to control the recorder's scanning electron beam (as opposed to mechanical laser methodology) helps reduce the need for maintenance. Automatic bit depth compensation has been designed to accommodate 8-, 10-, 12-, or 16-bit-per-channel files. The Nitro is also compatible with Cineon, Softimage and SGI file formats.

Celco, (909) 985-9868, fax (909) 982-2464, e-mail: info@celco.com; website: www.celco.com.

Cool Fluorescent Lighting Fixtures

The French company Balcar currently offers several new cool-burning fluorescent lighting products, including the Zoomlite 45, which is available on its own or as part of a three-head, portable ENG-type kit.

Designed for location lighting, the Zoomlite 45 weighs less than 5.5lbs (complete with its detachable reflector) and outputs up to 1,300 lux (120 footcandles) at 6.6' while drawing less than 0.2A in 230v and 0.4A in 120v. The illumination is even over the entire focusing range, from 15 to 45 degrees depending on the reflector used. Optional grid spots can be used to create a hard edge.

The lamp is fully dimmable (from 5 to 100 percent) and is available with either tungsten or daylight-balanced tubes, which have a life expectancy well in excess of 10,000 hours.

The Zoomlite 45 ENG-style kit comes complete with reflectors and stands, which fit perfectly into its custom soft-case carrying bag.

Balcar, 011-331-45-03-0030, Fax 011-331-45-03-1248, e-mail: mngt@balcar.com.

Upgraded Faux Water Software

Arete Image Software recently announced its Digital NatureTools for Softimage/3-D version 2.0, which is designed to help create water and atmosphere effects such as those seen in *Waterworld, The Fifth Element* and *Titanic*. Using this plug-in, CG artists can create authentic-looking water effects (including ripples, sprays and ship wakes based on actual hull

TIFFEN FILTER SHOP

- Best stocks in Europe
- Most competitive prices
- Order by phone for same day despatch

Tiffen filters perform superbly in all environments - from lunar landings and space shuttle voyages to extreme heat of deserts and the icy wastes of Antarctica. Trust Tiffen filters to perform for you.

Tiffen filters are the professional's choice world wide. Superior quality and amazing consistency make them the favourite for Motion Picture Productions, Commercials, Documentaries and News & Current Affairs.

Available in all popular sizes for Film, Video and Photographic use. Call the OpTex Tiffen Filter Shop today for fast and efficient service.

Contact the Tiffen Filter Shop team on **+44 (0)181 441 2199**, fax **+44 (0)181 449 3646** e-mail **info@optexint.com** or read more on **www.optexint.com/optex/**

OpTex®

Working to improve your image

CINEMATOGRAPHY electronics

2C CRYSTAL MOTOR BASE

- EASY TO HAND HOLD
- FILM WITH HMI LIGHTS
- TIME LAPSE / SINGLE FRAME
- 12 OR 24 VOLT BATTERY
- STOPS WITH MIRROR IN VIEWING POSITION
- COMPATIBLE WITH ARRI 3C, 2C, 2B, 2A
- COMPATIBLE WITH POPULAR ACCESSORIES
- CRYSTAL SPEEDS 1–80 fps FORWARD/REVERSE ALSO 33.333 fps & 16.666 fps

Of the many ways to drive an Arri 2C... THIS IS THE BEST!

31238 Via Colinas
Westlake Village
California 91362 USA
Phone : (818) 706-3334
Fax: (818) 706-3335

Lean on us when you need the best there is in film & video equipment

Century Tilt-Focus Lense

Now taking reservations for the latest in film production gear...

- **Century Precision Tilt-Focus Lense System** (available with Arri PL or B mounts)
- **Arriflex Swing/Shift Lense System** (PL mount only)
- **Century-Clairmont Swing/Shift Lense System** for today's PL mount 16mm, Super 16 and 35mm film Cameras
- **Zeiss Variable Primes** VP 1,2,3.
- *Three* complete Arri 435-ES cameras

Film/Video Equipment Service Company

800 S. Jason Street • Denver, CO 80223 • 303-778-8616 • FAX 303-778-8657 • 800-776-8616 • http://www.AmericaNet.com/Fvesco

Celebrating our 20th year serving the film & video industry

ENTERTAINMENT LIGHTING SERVICES

Lean On Us!

RENTALS AND SALES

- LIGHTING
- RIGGING
- SPECIAL EFFECTS
- STAGING
- MOVING LIGHTS

ELS

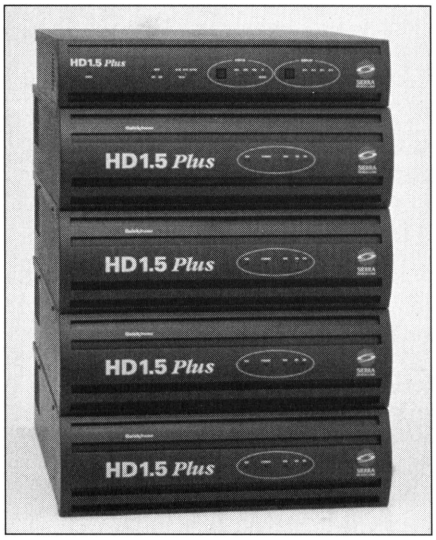
Rental & Sales of Quality Equipment to the Entertainment Industry

5426 Fair Avenue, North Hollywood, CA. 91601 (818)769-9800 (800)622-6628 Fax (818) 769-2100

geometrics), as well as photo-realistic clouds and atmosphere.

Among the newly designed features for version 2.0 is Nature FX, which includes "fly-through" volumetric clouds, upgraded water capabilities (e.g. ocean disturbances, looping waves, reflecting walls and underwater shader effects), as well as new atmospheric properties, including rainbows and sun halos. Other enhancements include a new user interface that offers QuickTime preview capabilities.

Arete Image Software, (818) 501-1045, Fax (818) 501-1196, website: www.areteis.com.



High-Definition Recording Options

Sierra Design Labs has unveiled two new products designed to facilitate HD video users on a budget.

The HD 1.5Plus video disk recording system allows the user to record in either standard 601 or uncompressed DTV/HDTV video. Incorporating four of Sierra's Quickframe recorders with a new HD processor, the HD 1.5Plus can store up to 120 minutes of uncompressed HDTV video. (Used separately, each Quickframe unit delivers standard D-1/ITU-R BT604-1 video.)

The HD 1.5Plus can be used as an edit or playback server for everyday production, posting and playout.

In HDTV mode, the HD 1.5Plus is a full-specification DTV recorder featuring record and playback of SMPTE

274M/292M 1920 x 1080 interlaced signals (1080i) with the ability to switch to SMPTE 296M 1280 x 790 progressive-scan video (720P). Meanwhile, each individual recorder in the array continues providing cost-effective standard-definition video capabilities.

Other features include full SCSI and Ethernet connectivity, RS-422 and a control panel port for connection to a Sierra HDTV control panel, standard SMPTE 259M inputs and outputs for use when the system is running in standard-definition mode with individual RS-422 control ports, standard and tri-level sync, parallel and serial I/O, fibre channel and gigabit Ethernet options.

Sierra's other offering is the Quickframe HD360, an add-on to existing Quickframe video disk recorders which instantly turns any Quickframe unit into an HDTV video recording, playback and editing system.

The upgrade gives any Quickframe system total compatibility with Panasonic's AJ-HDP-500 HDTV 1080i digital video recording processor, an economical 4:1 compression system which is becoming a staple in many production environments. HD360-equipped VDRs will operate at the required 360Mbit/s rate with 18 MHz sampling, enabling true DHDTV/16 x 9 aspect ratio recording in single or multiple Quickframe VDR channels.

An HD360 Quickframe can be used as part of an HD editing system, (offering full caching, non-linear record and playback), as a still and clip store, as a pin-register capture device in a telecine suite, or as a camera recorder in a motion-capture studio.

Like all Sierra Design labs products, the Quickframe HD360 option is modular in design. It is compatible with standard 270Mbit 13.5 MHz SDI video (switching is achieved by simple software selection). No recabling or patching is required because both 270 and 360 Mbit outputs have separate physical connections, allowing true sharing of Quickframe resources between standards. It also allows full backup and restore to SCSI tape drives such as Exabyte and DLT for archiving of date or

LEE Consistency

Top Producers, Directors and Agencies specify Photo-Sonics
High Speed Cameras for slow motion effects.

We rent a complete line of 16mm and 35mm cameras operating up to 10,000 fps. Whatever your needs in high speed cinematography, Photo-Sonics has the camera and personnel to assist you. Contact Conrad Kiel, Tom Boyd or Jennifer Hanson.

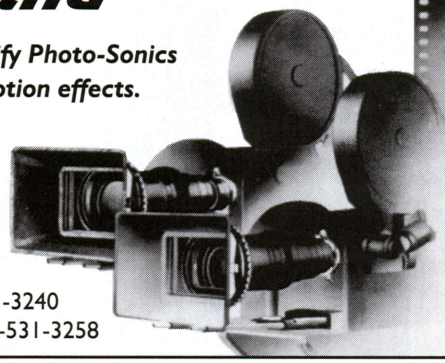


PHOTO-SONICS INCORPORATED
820 S. Mariposa St.
Burbank, CA 91506
818-531-3240
Fax 818-531-3258

American Cinematographer

Buy 3 Caps FREE Get the 4th

➢ *Caps to choose from:*
Beige cap with green logo
Black cap with white logo
Blue denim with blue logo
Grey cap with black logo
Red cap with black logo
White cap with black logo
White cap with red logo

➢ *To order:*
Please refer to order form when ordering by mail or:
Phone: US (800) 448-0145
Phone: (213) 969-4333
Fax: (213) 876-4973

➢ *At the low price of:* $12 EACH

Offer expires 07/15/98

Visit us online at: www.cinematographer.com

CINEMATOGRAPHY inc
electronics

2C CRYSTAL MOTOR BASE

• EASY TO HAND HOLD
• FILM WITH HMI LIGHTS
• TIME LAPSE / SINGLE FRAME
• 12 OR 24 VOLT BATTERY
• STOPS WITH MIRROR IN VIEWING POSITION
• COMPATIBLE WITH ARRI 3C, 2C, 2B, 2A
• COMPATIBLE WITH POPULAR ACCESSORIES
• CRYSTAL SPEEDS 1–80 fps FORWARD/REVERSE
ALSO 33.333 fps & 16.666 fps

Of the many ways to drive an Arri 2C... THIS IS THE BEST!

31238 Via Colinas
Westlake Village
California 91362 USA
Phone : (818) 706-3334
Fax: (818) 706-3335

SPEED CONTROL 4

THE SMALLEST SPEED CONTROL ON THE MARKET IS NOW BIG ON FEATURES

Arriflex, Aaton, and Panaflex Compatible
Crystal Speeds from 1.000 to 150.000 FPS
Multi-function Smart Alphanumeric LED Display
Auto-Dimming Display Conserves Battery
Phase Button for Filming Video Monitors

MEDIA LOGIC
17 West 20th Street · Suite 5E · New York, NY 10011
Tel: 212 924-3824 · Fax: 212 924-3823
Internet: http://www.media-logic.com · Email: info@media-logic.com

MODULAR

CHIMERA has just made available some new and vastly improved F2 light banks. How? Two words..."modular construction"
...the light bank's frames are now built of pre-assembled aluminum truss sections that cut assembly time to about 1/10th of what it used to be.

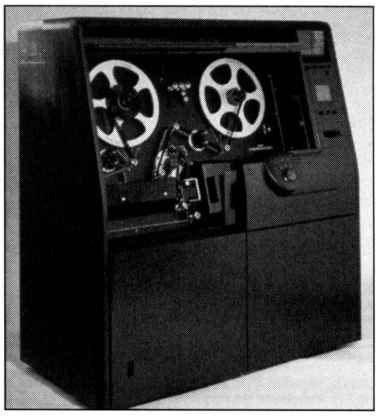
Of course, the original "component" F2s are also available with compact breakdown and ease of portability as their primary advantage. And *every* F2 accepts strobe, HMI and tungsten fixtures. They're all constructed to offer you multiple rigging options. And if they all weren't light weight and super rugged, they just wouldn't be wearing the CHIMERA label.

CHIMERA

(888)444-1812 / FAX (303)444-8303
E-mail: chimera@usa.net / http://www.chimeralighting.com

for removable date storage.

Sierra Design Labs, (702) 831-7837, Fax (702) 831-5710, website: www.sdlabs.com.



All-New Film-Scanning Telecine

Cintel, Inc. has announced that it is now shipping its C-Reality and HUEfx multi-standard film scanning system. The new C-Reality machine supports 525/625 and true 2K data. Advanced upgrades will be available in the autumn for real-time, high-definition scanning.

The heart of the C-Reality is Direct Scan, a comprehensive image scanning and detection system that will allow full 14-bit digital scanning resolution, 2048 pixels by 1536 lines for 2K data, in each of the three primary colors (red, green, blue) to optimize the maximum color detail available off the film master. Direct Scan represents a straight optical path from the machine's cathode ray tube (CRT) light source. This linear alignment generates more light for processing, film-matching and color-splitting.

This new Cintel telecine employs the latest CRT package manufactured by its sister company Brimar, the HD2121 light engine. This CRT features simple, plug-and-play installation and a snap-on EHT connector. The HD2121 package features a fast broadband emission phosphor screen for noise-free images, a new electron gun with improved electron optics with a dispenser cathode to achieve higher resolution, a 30kV final anode for maximum light output, a deflection coil that features low inductance to match high-speed deflection

amplifiers, and a focus coil to match electron optics to the electron gun.

With the advent of high-definition television, scanning flexibility will be the key to obtaining full-resolution images at whatever standard (or standards) are used. Toward this end, the C-Reality's flying spot technology allows the scanning rate to be easily changed, so film will always be scanned at the correct HD standard with full resolution in each color.

The C-Reality has two internal color correctors — one before the gamma corrector and one after it. This allows the colorist to correct and manipulate the image simultaneously. Secondary color correction includes user-definable zones and sectors within each zone. This processor, the HUEfx, operates at the full internal resolution of 14 bits per color, with direct access to all of the functionality of the telecine.

Cintel, Inc., (805) 294-2310, Fax (805) 294-1019.

Color Correction Enhancement

The Eastman Kodak Company and da Vinci have announced a collaborative effort to improve productivity and increase creativity in telecine color enhancement. These efforts have resulted in a new Rapid Film Setup capability which will be part of the new da Vinci 2K color enhancement, available in the Fall of 1998. This new capability is designed to foster quicker, more efficient and higher-quality film-to-video transfers and digital processing by colorists working with Kodak films.

The Rapid Film Setup capability automates time-consuming calibrations and setup tasks previously requiring manual adjustment before every session, and enables colorists to concentrate on the creative aspects of the transfer. The new capability combines Kodak's unique knowledge of film emulsions and proprietary image processing algorithms with da Vinci's image processing systems.

The Rapid Film Setup includes automated adjustment of lift, gamma, and gain optimized for the imaging characteristics of different Kodak color nega-

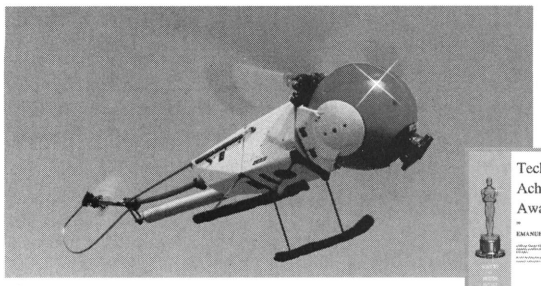
LEE Quality

NEW
LPC 90
LIGHT PRIORITY CONTROLLER
INTERVALOMETER WITH AUTOMATIC SHUTTER SPEED CONTROL
NORRIS FILM PRODUCTS
- Shutter Speeds 1/16th to 990 sec. in 1/16th sec. increments.
- Interval from 1 sec. to 100 hours (99hrs.-59min.-59sec.)
- The Burst Count 1- 9999 frames
- Metering Exposure Control
- 8 Digit LED Display Showing Shutter Speed, EV, and Interval Count Down.
- Memory: Saving Last Calibrated Shutter Speed, Interval and Burst, if Power is Interrupted.
- Size 1-3/4 x 1-3/4 x 5-1/4 Inch
- Weight: 6 oz.

1014 Green Lane • La Cañada, California 91011
TEL (818) 790-1907 • FAX (818) 790-1920

Prime Quality with Vision
The prime range of wide angle prime lenses.
super 16
Super Cine Lenses A new breed of wide angle lenses with all these features:
• Luminous T stop and focus scales • Accept standard Tiffen 86mm correction filters
• Built-in focus and iris gear • Multicoated lens elements
• Manufactured in the United Kingdom by OpTex
OpTex Super Cine Lenses
4mm f1.8/T1.9 | 5.5mm f1.8/T1.9 | 8mm f1.8/T1.9
The new OpTex Super Cine range is a matching series of three prime quality wide angle lenses designed specifically for Super 16 cameras. With their superb optics, these lenses give very sharp images with low distortion, which set new standards of quality in Super 16 wide angle lenses.
Call ZGC now on:
Phone: (973) 335 4460
Fax: (973) 335 4560
www.zgc.com
International sales +44 181 441 2199
Int. Fax +44 181 441 3646
www.optexint.com/optex/
OpTex®
Working to improve your image

ACADEMY AWARD® WINNER



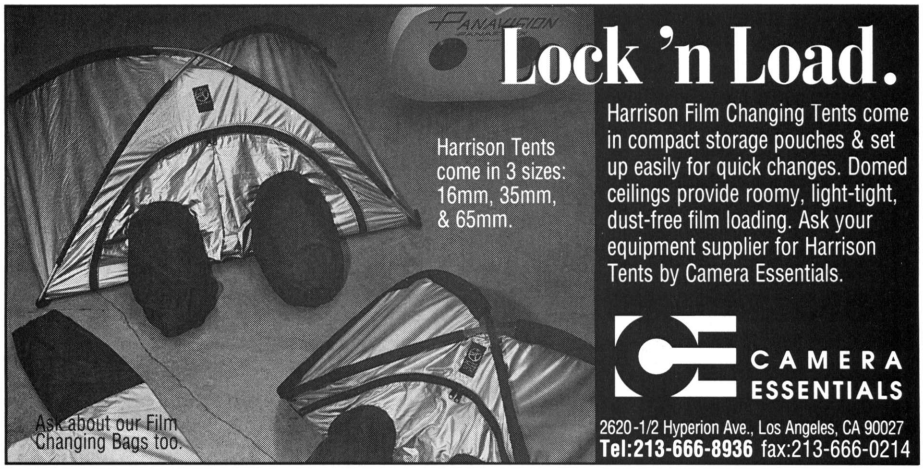
FLYING CAM
MOVING-CAM s.a.

Close Range Aerial Photography
for Motion Picture and Television with
Remote Controlled Miniature Helicopter.

• **U.S.A.** Los Angeles
Ph. **310 581 9276**
FAX **310 581 9278**

• **EUROPE** Belgium
Ph. **32-4 227 3103**
FAX 32-4 257 1565

ACADEMY AWARDS® and "OSCAR" Statue are registered trademarks of ©A.M.P.A.S.®



Lock 'n Load.

Harrison Tents
come in 3 sizes:
16mm, 35mm,
& 65mm.

Harrison Film Changing Tents come in compact storage pouches & set up easily for quick changes. Domed ceilings provide roomy, light-tight, dust-free film loading. Ask your equipment supplier for Harrison Tents by Camera Essentials.

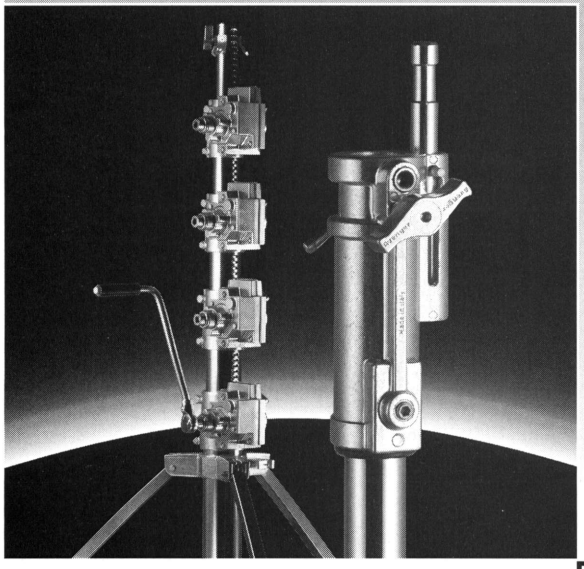
CAMERA ESSENTIALS

Ask about our Film
Changing Bags too.

2620-1/2 Hyperion Ave., Los Angeles, CA 90027
Tel:213-666-8936 fax:213-666-0214

AVENGER®

Grip for the Next Millennium!



Gear up your truck today with the only grip tough enough to put a hurt on Father Time: Avenger! Avenger grip equipment is designed and built to work better and last longer through daily use and abuse in the studio and on location. Avenger is also the only grip readily available on both coasts and, we maintain the most extensive stock in the industry.

For more information on the full line of Avenger grip equipment, see your dealer, contact us or visit our web site.

565 East Crescent Avenue, Ramsey, NJ 07446-0506 • (201) 818-9500 • Fax: (201) 818-9177
4121 Vanowen Place, Burbank, CA 91505-1072 • (818) 566-9754 • Fax: (818) 566-9721
e mail: info@bogenphoto.com • web: www.bogenphoto.com

bogen cine

tive stocks, including 640T Primetime teleproduction film. The automated setups are designed to provide optimum reproduction of white, black and mid-tones. It also includes automatic setup of electronic color masking for current-generation telecines, which provides the highest-quality rendition of saturated primary colors.

Contact your local Eastman Kodak Co. representative; website: www.kodak.com/go/motion.

Zoom/Focus Control For Steadicam

Arizona-based Stanton Video Services offers a new handle controller for Steadicam operators. The device operates from a 12v power supply and offers camera start/stop and complete gear-operated zoom/focus operation for either film or video lenses. The handle measures 6.75" x 1.65" and weighs just 13.6oz complete with mounting bracket.

The video lens model is available with a Fujinon focus gear, 12-pin (Fujinon or Nikon) zoom cable adapter, a 14-pin (Angenieux or Nikon) zoom cable adapter, and an (Angenieux or Nikon) lens mount knob.

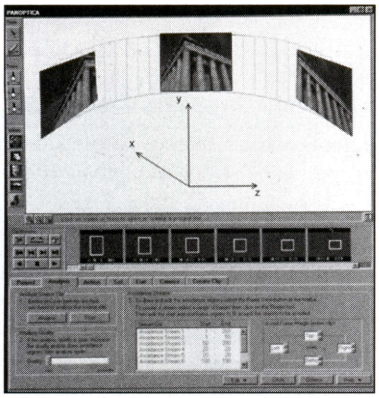
The film lens model is available with a 32-pitch film focus gear, a 48-pitch film focus gear, a film-focus-motor clamp (which fits 15-19mm rods), and a camera start switch (for either standard Arriflex, the Arri 535, or Panavision).

Stanton Video Services, (602) 493-9505, Fax (602) 493-2468, e-mail jimjib@goodnet.com; website: www.goodnet.com/~jimjib.

Panoramic Image-Processing Software

Harlequin, Inc., has introduced Panoptica, a new software-based image-processing technology for motion picture and video production. Panoptica manipulates sequences of images, enabling visual effects artists to achieve complex effects quickly and cost-effectively.

The software works by capturing the content of each frame taken by a panning, scanning, tilting or locked-off static camera. Its built-in Quenza technology then analyzes data from all the



frames collectively. Information from one frame can be applied to another. Changes can then be enacted across a sequence of frames automatically.

In clips taken by a panning, tilting or locked-off static camera, the viewpoint is constant from one frame to the next. Information comprising one frame overlaps much of the information from adjacent frames in a sequence. Therefore, Quenza can easily take information and apply it to another. It achieves best results with sequences in which moving objects or actors appear in front of an unchanging background.

The applications for Panoptica include background-plate production, artifact removal, addition, and retouching (rotoscoping, removing wires and rigs, removing irregularities); reshooting with a virtual camera (creating new shots, zooming, reversing the direction of a camera movement, reshooting in different aspect ratios, remastering); creating visual effects (compositing live action with effects, blending old scenes with new), and restoring films.

Harlequin Inc., (617) 374-2400, Fax (617) 252-6505, e-mail: web@harlequin.com; website: www.harlequin.com.

Infrared Imaging Systems

Flir Systems has unveiled their new Thermovision 550 and 570 models of handheld focal plane array infrared (IRFPA) imagers. The devices incorporate the latest radiometric microbolometer FPA detector, which does not require cooling, so the maintenance issues normally associated with such imagers are eliminated.

LEE Filters

LEE Guaranteed

There is no compromise.

Mail this ad to *LEE* Filters with a return address and receive a free cinematographers swatchbook

2301 W. Victory Blvd., Burbank, CA 91506
Voice: 818-238-1220 Fax: 818-238-1228

Visit us at ShowBiz Expo '98 June 12-14 at L.A. Convention Ctr. Booth #1228

Over 20 new Magliner accessories, including the Baja (instant) Conversion Kit and the now famous Steadi-cam/Monitor Bracket Pin Holder

Magliner Jr. $ 351.00 Magliner Sr. $ 375.00 (not shown)
(Pictured with optional 8" Wheel Conv., Top & Bottom Steel Shelf & Tripod

Backstage Equipment, Inc. • 8052-8054 Lankershim Bl. • North Hollywood, CA 91605 • USA
(800) 69-CARTS • (818) 504-6026 • Fax (818) 504-6180 • E-mail Backstaged@aol.com • www.backstageweb.com

SUMMER WORKSHOPS & MASTER CLASSES

100 One-Week Workshops • May through October

Camera In Action • Steadicam Workshop
Feature Film Lighting • Documentary Camera
16mm & 35mm Camera • Camera Assistant & Operator
The Director of Photography Master Class • Producing
Electronic Cinematography • Advanced Digital Video
Nature & Wildlife Camera Workshop • & Many More!

Three-Month Filmmakers' Residency, Fall & Spring.
Write or call to receive a catalogue outlining all 100 workshops.
For 25 Years, Film and Photography's Leading Workshop Center.

The International
Film & Television
WORKSHOPS
2 Central Street · PO Box 200
Rockport, ME 04856
Phone: 207-236-8581 · Fax: 207-236-2558
mpw@midcoast.com · http://www.meworkshops.com

CHESAPEAKE CAMERA
RENTAL EQUIPMENT AVAILABLE:
ARRI BL4's Evolution | ARRI 435 ES | Aaton XTR Prod.
Clairmont Swing & Shift lenses | Jimmy Jib Triangle
The largest, most complete film rental shop in the Mid-Atlantic. Washington D.C., MD, PA & VA.
CALL 1.800.573.7354
www.chescam.com

A NEW CAMERA SUPPORT SYSTEM
- 35mm REFLEX CAMERA
- ACCURATE THRU THE LENS VIEWING
- FULL RANGE OF LENSES
- WIRELESS VIDEO TRANSMISSION
- LOW MODE TO HIGH MODE IN 2 MINUTES
- FULLY BALANCEABLE
- WEIGHS 17LBS.
- NO SPECIAL OPERATOR REQUIRED

DOGGICAM
818.845.8470 • FAX 818.845.8477 • doggicam@aol.com

question
Where did
MICHAEL MANN, TAK FUJIMOTO, ROGER PRATT, HOWARD ATHERTON, MARK GOLDBLATT & CURTIS CLARK
go to FILM SCHOOL ...
... and which FILM SCHOOL is the oldest in the U.K.?
Which FILM SCHOOL has trained students from more than 80 countries?
Which FILM SCHOOL is in the heart of Central London?
Which FILM SCHOOL offers work on at least 6 films in two years?
Which FILM SCHOOL includes two 35mm films in the Curriculum?
Which FILM SCHOOL is a not-for-profit educational charity?
answer
THE LONDON INTERNATIONAL FILM SCHOOL
For full details of the two-year, full-time DIPLOMA COURSE:-
CALL: +44 171 836 9642 or FAX: +44 171 497 3718 or E-MAIL: lifs@dial.pipex.com
OR Write to Dept. AC10, The London International Film School, 24 Shelton Street, London WC2H 9HP, U.K.
OR LOG ON TO OUR WEB PAGES AT: www.lifs.org.uk where you can find complete details of the Syllabus, Fees, Application and Enrolment. There is a convenient form for requesting a Prospectus Pack as well as News Items, details of Graduates' work and an Ex-students' Contact Group.

Without a cooler system, the 550 and 570 models feature space for an on-board battery, which provides up to 1½ hours of continuous operation. In addition, the startup time for these models is less than 30 seconds and the operation is quieter than with cooled units.

The 550 can store over 1,000 12-bit high-res still images on a PC-Card high-capacity drive, while the camera's most commonly used functions are accessed by the touch of a button. (More advanced functions are displayed in pulldown menus on its integral, telescoping color viewfinder.) All functions can be operated via the RS 232 port.

The 550 also features a 4x electronic zoom, an internal spectral filter that eliminates the risk of contamination or damage to the camera's optical surfaces, a mounting shoe for an optional LCD, a choice of lenses, and a "smart" battery system.

In addition to the above functions and features, the 570 model can store over 1,000 14-bit still images on its PC-Card high-capacity drive.

Flir Systems, (503) 684-3731, Fax (503) 684-3207, e-mail: marketing@flir.com; website: www.flir.com.

FiLMBOX Upgrade

Kaydara Inc. has introduced a new version of their real-time motion-capture software, FiLMBOX. With enhanced character animation, real-time shadows and improved interconnectivity with 3-D packages, Version 1.4 is one of the fastest and most efficient software packages for applying motion-capture-data directly to characters.

FiLMBOX also provides add-on modules for advanced animation techniques such as cartoon rendering, real-time facial animation and voice analysis Available on both the Windows NT and Silicon Graphics IRIX (SGI) operating systems, FiLMBOX imports and exports to all the main 3-D packages, including Softimage, Alias/Wavefront Kinetix and LightWave.

Kaydara, (888) 842-6842 (U.S.and Canada), (514) 842-8446 (Int'l), http://www.kaydara.com (Internet). ■

Points East

Indie Filmmakers Catch Boogie Fever

by Eric Rudolph

If the Nineties seem a bit bland, you may be uplifted by an upcoming slate of films focusing on the days when seemingly everyone partied all night to loud, thumping music and when a brave soul or two found that the perfect clothes for a night of dancing might be none at all. With director Todd Haynes' *Velvet Goldmine* and Mark Christopher's *54* on the horizon, it appears that the onslaught of Seventies-era disco movies has finally arrived.

Leading the pack is *The Last Days of Disco,* the third feature from New York-based independent filmmaker Whit Stillman (*Metropolitan, Barcelona*), who casts an affectionate glow on those naughty nights of fun when mirror balls still spun.

Disco follows a group of recent college graduates caught up in the waning days of the scene, even as they face their new grown-up problems, such as friends with hidden agendas, the desire for career advancement, and the prospect of being held accountable for skimming from huge piles of disco cash.

The appealing young actresses Chloe Sevigny (*Kids, Palmetto*) and Kate Beckinsale (the English star of *Cold Comfort Farm,* here sporting a perfect American accent) head the cast, which also includes Robert Sean Leonard, Mackenzie Astin and Stillman stalwart Chris Eigeman.

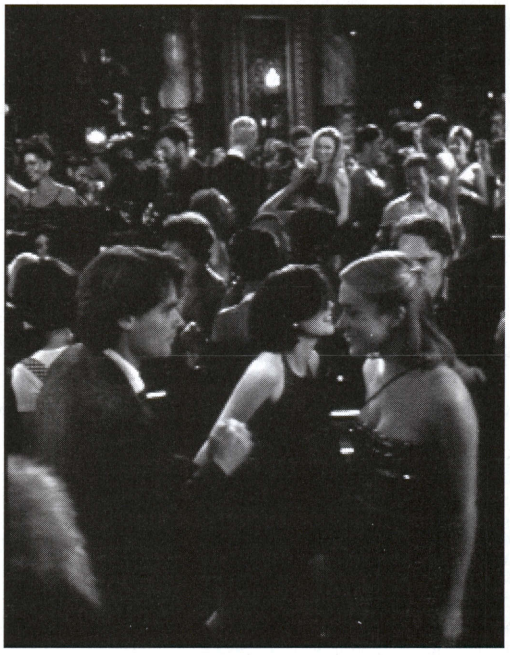
Stillman drew inspiration for the film's screenplay from his own memories of partying at New York's infamous Studio 54, the hottest of the Seventies hot spots. Even though the actual club space (a former theater used in the Fifties and Sixties as a CBS television studio) was available and scouted, the filmmakers eventually opted for what turned out to be a more interesting location: a grand old former Loews movie palace, just across the Hudson River in Jersey City.

To help him bring the colorful milieu back to life, Stillman once again turned to cinematographer John A. Thomas, who had photographed both of the director's previous films. Thomas earned a 1995 Independent Spirit Award for his beautiful cinematography in *Barcelona,* and an Emmy nomination for the HBO film *Norma Jean and Marilyn.* The cameraman has also lent his skills to the features *Kicked in the Head, Palookaville, The Night We Never Met, Under the Bridge* (see L.A. Indie Film Fest, *AC* June '97), and a half-dozen other independent projects.

The *Disco* duo took a decidedly different angle in confronting the task of filming half of a feature film in a dance emporium. "We didn't do 'Disco 101' lighting, with smoke and hard lights hitting people against a black-walled void," explains Thomas. "Whit likes to turn things around, so he suggested that we skip the smoke. At first I was horrified. I had counted on having some atmosphere that I could color with light. If you had walked onto our set it would not have necessarily looked like a disco, because Whit wanted to portray the era more like his memories of that time, in the way that memories are always better than the reality."

That directive led Thomas to create a lively but not chaotic dance floor which allowed viewers to see into the shadows. "The look was much cleaner than reality," he notes. "We didn't have lights cutting through fog and blowing out the background. It turned out to be better not to have smoke obliterating the disco. At any rate, working with smoke for the whole four-week disco shoot [out of a nine-week schedule] would've been a nightmare."

Stillman adds that one reason he chose to skip the smoke was to avoid obscuring Thomas' signature look.

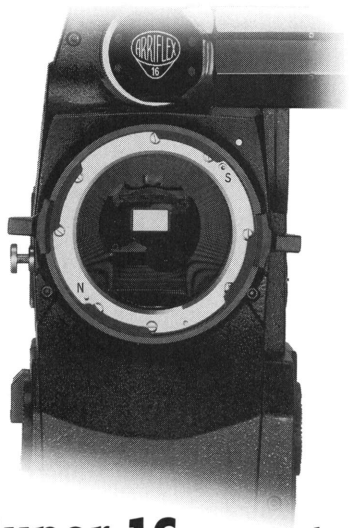


Actors Robert Sean Leonard and Chloe Sevigny "do a little dance" during *The Last Days of Disco,* the latest collaboration between director Whit Stillman and cameraman John Thomas.

"John's photography has a luminous quality," he attests. "We've always done period films together, and John knows how to make the actors look romantic but not unrealistic."

One of the first steps involved in transforming the lobby of an old movie palace into a happening early-Eighties dance club was hanging a barrage of old and new lighting effects, as well as some film fixtures, from a huge black scaffold. Old low-tech disco effects were freely mixed with the new. Thomas recalls, "We had these four-head spinning lights and other period effects,

CINEASST



Super 16 Conversion
& Optional Video Assist

www.cineasst.com
email: info@cineasst.com
T.(416) 975-2565 F.(416) 975-0895

New Videotape FREE

This updated videotape demonstrates how to make your films more visually exciting. It also shows you how to produce them in less time with fewer setups. The video has been described by most people who have viewed it as the best film of it's type ever made. Send $10 which will be refunded when the video is returned.

Cinekinetic U.S.A. Inc.
1405 Vegas Valley Dr. #177
PO Box 73063, LasVegas, NV89109
Tel/Fax: (702) 731-4700
E-mail: cinekine@ois.com.au

CINEKINETIC

but we also had modern Cyberlights, which we used to add a little effects punch in less time than we could with the vintage gear."

While the palette was more muted than the old dance-floor reality, the filmmakers deployed a liberal array of theatrical lighting fixtures. Thomas explains, "Par cans were mounted with motorized strips of different colored gels to backlight the dancers, so we could get color changes quickly. We also used gobos and gobo spinners to break up and change colors."

Of course, this film offers the trademark stamp of any Whit Stillman film: free-flowing torrents of dialogue. The extended conversing in the clubland sequences called for a restrained use of atmospheric effects. Thomas details, "During dialogue scenes, the background dancers were lit in the same bold, high-contrast manner that we used when they were the main focus. However, the disco effects would be slowed down and softened so they would not distract from the dialogue. The audience still gets the idea that the lead actors are sitting and talking very near to an active dance floor, but we didn't have a very narrow spot smashing them in the face, which might occur in reality."

This lesson was learned the hard way, as Stillman recounts: "Early on, we let the disco effects light play with less control, but in the dailies we saw that when a light hit an actor in the nose, your attention would be drawn away from what they were saying and onto that light." Adds Thomas, "We settled on having the hard light and effects hit the actors' clothes or the table they occupied, to maintain the illusion that that they were in a club."

The lighting effects were also adjusted to fit the scene's mood. "Disturbing moments have more garish, multi-colored disco lights, while calmer scenes have a softer, tungsten, 'modified living room' look," says the director.

Thomas is fond of large, highly diffused light sources, which he mixed with the real disco effects. "The key light would usually be a large soft source, created with a 6' by 6' or 12' by 12' piece of tracing paper or grid cloth."

Visual accents for dialogue scenes were often provided by mild disco effects created with film lighting. "We'd hook Par cans up to a dimmer so they'd be in a chase pattern," Thomas explains. "The fill light, and occasionally the key, would often be pulsing and changing colors as if it was spill from the dance floor. However, we tried to keep the key clean most of the time, usually warming it up a little to look like tungsten."

Thomas' A-camera on the show was a Platinum Panaflex, which represented an enjoyable step up, gearwise. "I've come up [in the industry] in a low-budget way, but Panavision has always been great to me. They would always find a camera for me — a Gold or something else. Since I was never able to afford Primos, I got used to using MKII Ultra Speed primes, which I love and which we also used on *Disco*."

The cinematographer's film stocks were Eastman Kodak's 5293 for day scenes and 5298 for all of the disco scenes and night exteriors. "Even with the hundreds of light we had, we still needed a 500 ASA stock," he says.

Made for $8 million, *The Last Days of Disco* is a big-budget film by Stillman's standards. Thomas offers, "*Metropolitan* [which was shot in Super 16] was done for $225,000; at that point, we had our first release print! *Barcelona* cost $3.3 million. It was great to have the money to use authentic period props and authentic Seventies and Eighties cars on the streets."

And *Disco* does indeed capture the madcap flavor of its time period. "John's approach to disco lighting always added something to the picture," beams Stillman. "When we first saw the answer print, he joked that he wants to use our favorite disco effect — a mirror ball — in all of his films from now on. Of course, that won't work on my next film, which I hope will be set in the 18th Century — I can't wait to see what John does with candles, torches and fireplaces!" ■

Books in Review

by George Turner

Operating Cinematography
by William E. Hines, SOC
Ed-Venture Films/Books,
270 pps., paper, $24.95

Conrad Hall, ASC has called camera operating "my favorite job — the best job in cinematography." Now — and it's about time! — a seasoned operator with 47 years of experience has written a fully practical guide to the profession. Hines begins his book with a brief history of camera operation, illustrating how the duties of the operator have changed with the evolution of cinematography. In summing up, he notes that the camera operator of today "may be a man or woman operating a film or video camera, in a studio or on location — domestic or foreign; in the air or underwater; perched on the end of a crane, or on a plane, boat or dolly; operating a handheld, body-mounted, or remotely-controlled camera; or working on a feature, commercial, an episodic or sitcom series, or on a documentary. No matter where or what the project or tools, good operating practices, which have evolved over the years, are being put to good use..."

A large portion of the text deals with "how it's done" and the duties and responsibilities of the operator. Also detailed are the many aspects of set etiquette and attitude, pitfalls to be avoided, and safety control. Considerable coverage is rightly given to the working relationships of the operator with other members of the production team, in addition to the camera crew — directors, producers, art directors, set dressers, grips, recordists and other craftsmen and artisans. The necessity of "networking" for survival in today's free-lancing atmosphere, how to deal with unforeseen production problems, and the importance of developing and maintaining a professional attitude are among the many important items covered in down-to-earth terms with refreshing candor.

Hines covers a lot of territory and does it very well.

A Critical History and Filmography of Toho's Godzilla Series
by David Kalat
McFarland, 275 pps.
casebound, $48.50

GODZILLA!
by Frank Lovece
Quill, 228 pps.,
paperback, $16

Gojira, better known in America as Godzilla, is a fictitious giant reptile that periodically rose from the depths of an H-bomb-poisoned sea during the course of 22 feature films produced in Japan between 1954 and 1995. The first of these epics, *Gojira,* cost 60 million yen (then about $900,000), three times the average cost of a Japanese feature, and was filmed in 122 days. The monster, played by actors in elaborate costume, vaguely suggests a cross between a bottom-heavy *Tyrannosaurus rex*, a stegosaurus and a traditional Chinese dragon, grossly enlarged by radiation to a height of perhaps 500'. In the initial installment of the series, the creature tramples Tokyo (a 1/25-scale model) and also gives it a roasting with gusts of atomic breath. In later episodes, he also wipes out Osaka and other cities.

Gojira was a big hit in Japan. The recut and redubbed U.S. version, which appeared in 1956 as *Godzilla, King of the*

BIRNS & SAWYER HOLLYWOOD

Losmandy
3-way Leveller

Show-Biz Expo Los Angeles
June 12-14. Booth #1520

$ 995.00

This is the most affordable **3-way Leveller.** It features a **Mitchell base and Mitchell top.** 100mm or 150mm tops available on special order. All machined black anodized aluminum and stainless steel, the Losmandy 3-way Leveller will support 300 lbs.

BIRNS & SAWYER, INC.
1026 N. Highland Ave. , Hollywood, CA 90038
(213) 466-8211 · Fax: (213) 466-7049
e-mail: info@birnsandsawyer.com
website: www.birnsandsawyer.com

ARRI 435

Sales and Rental
CINEQUIPT INC.
Video & Film Equipment

856 Raymond Avenue

St.Paul, MN 55114

612/ 646-1780

Remember September...

The second issue of *American Videographer* will be polybagged with your upcoming September issue of *American Cinematographer* and sent to all paid *AC* subscribers at **no additional cost**. In April we sent the first issue of *AV*. Thank you for your many complimentary letters regarding this collector's Item and for encouraging us to continue this series. A minimum of four issues will be sent in 1999.

Important! *AV* will not be available at newsstands.

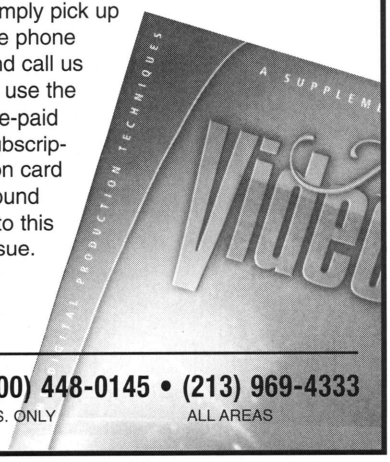
Because many of our subscribers are on vacation, on location, or on special assignment during the summer months and often fail to renew their subscriptions, **this is an urgent reminder to renew or extend your subscription NOW.**

In addition to *AV,* there are many other advantages for paid *AC* subscribers. They include special two-year rates with a bonus of two extra issues, personal subscriber PIN numbers to access all areas of our website, and lower rates for gift subscriptions, books and much, much, more!

All of this is in addition to *AC's* in-depth articles by top feature writers, and other valuable information that KEEPS you on the cutting edge of our industry.

Don't miss the next exciting *AV* supplement polybagged with the September *AC* issue! Be sure to renew or extend your subscription today to avoid interruption in your monthly service.

Simply pick up the phone and call us or use the pre-paid subscription card bound into this issue.



(800) 448-0145 • (213) 969-4333
U.S. ONLY ALL AREAS

Monsters (featuring intercut footage of Raymond Burr as an American news correspondent), intrigued American youngsters as well, as did the sequels. Four decades later, these former kids, exultant with nostalgia, are lining up to see Hollywood's new, super-expensive *Godzilla* flick, detailed in this issue (see page 58).

Both of the authors reviewed here reveal a lot of interesting information for Godzilla's many fans, including detailed synopses, credits and production notes from both Japanese and American editions of each film. There is biographical information on the creators and performers (including the men who suffered inside the heavy, smothering Godzilla suits), descriptions of the special effects techniques used at Toho Studio to create the monster and its battles with both men and other monsters, and some insights into the artistic and philosophical differences between Japanese and American filmmakers. The authors also make a good case for the superiority of the original versions of the films as compared to the heavily edited American -release incarnations.

The most conspicuous difference between these tomes is in the presentation (library binding vs. paperback, with the expected gap in cost) and the fact that Lovece's book is profusely illustrated, while Kalat's has nary a picture. The writing styles of the authors is also quite different, although both men mention being introduced to Godzilla when they were children. The serious Godzilla fan will prefer Kalat's straightforward, almost worshipful approach, which emphasizes the artistic and philosophical differences between Japanese and American filmmakers and explains that realism is not an important aspect of Japanese art. Those who can take a little kidding will enjoy Lovece's lighter tone, which offers considerable humor in the text and predominantly flippant photo captions. He also includes material on Godzilla toys, books, TV offshoots, and so on. These chapters have whimsical titles such as "Telezilla," "Ridezilla," "Toyzilla," "Bookzilla" and "Rockzilla."

Duke: The Life and Image of John Wayne
by Ronald L. Davis
University of Oklahoma Press, 400 pps., cloth, $24.95

Although this is the umpteenth volume about John Wayne, it should not be overlooked, because it has a lot to offer. As expected, the author revisits a lot of well-traveled territory, but instead of just retreading the preceding tomes, he also includes fresh material from unique interviews with a formidable number of men and women who knew the Duke well. Among the wives, relatives, friends and co-workers who have their say are some who worked with Wayne early in his career, such as Paul Malvern, producer of the Lone Star Westerns; Marsha Hunt, Ruth Hall Garmes and Yakima Canutt; and an array of stalwarts from his later pictures, including Maureen O'Hara, Ben Johnson, Claire Trevor, Henry Hathaway Dobie Carey and others. Davis gathered these interviews while conducting an oral history program over a 25-year period, and many of the respondents are no longer alive.

The result is a more even-handed view of Wayne than usually is accorded him, and the author avoids the extremes of idolatry and debunking to which the actor has often been subjected. This edition thus offers more of the real John Wayne than most of its predecessors. ■

NEXT MONTH IN *AC*:

Armageddon
Director: **Michael Bay**
Cinematographer: **John Schwartzman, ASC**

The X-Files Movie
Director: **Rob Bowman**
Cinematographer: **Ward Russell**

Brooklyn South
Director: **Michael Watkins, ASC**
Cinematographer: **Bill Roe**

Classified Advertising

RATES

All classifications are **$3.50 per word.** Words set in **bold face** or all capitals are **$4.00 per word.** First word of ad and advertiser's name always set in capitals without extra charge. No agency commission or discounts on classified advertising. PAYMENT MUST ACCOMPANY ORDER. VISA and Mastercard accepted. Send ad to **Classified Advertising, American Cinematographer, P.O. Box 2230, Hollywood, CA 90078.** Or FAX (213) 876-4973. Deadline for payment and copy must be in the office by 1st of second month preceding publication. Subject matter is limited to items and services pertaining to filmmaking and video production. Words used are subject to magazine style abbreviation. **Minimum amount per ad: $35.**

CLASSIFIEDS ON-LINE

Ads may now also be placed in the on-line Classifieds at the ASC web site.

Internet ads are seen around the world at the same great rate as in print, or for slightly more you can appear both online *and* in print.

For more information please visit **www.cinematographer.com/advertiser,** or e-mail: **classifieds@cinematographer.com.**

EQUIPMENT FOR SALE

AMERICAN CINEMATOGRAPHER, International Photographer (Including Vol1. No.1), SMPTE, etc. Rare back issues. Star Trek and other scripts, Photos, Posters, Film Books, Story boards (including "Mad, Mad World" by Willis O'Brien), Matte Paintings, Specialized equipment, Historic files and movie items. Linwood Dunn, ASC (818) 843-3866, or P.O. Box 10252, Burbank, CA 91510-0252

THE VISUAL PRODUCTS ads you see here are just a sample of the thousands of motion picture items we have available. All equipment comes with a money back guarantee! Check out our complete list on-line at **http://www.visualproducts.com** or Call us at (440) 647-4999.

ARRI SB, 3 PRIMES OR ZOOM, VARI/CONST. MOTOR, MATTEBOX $3,000. TEL (212) 226-5658.

SPY NAGRA SN $1,200. snst $1,600. (416) 762-8551 Edouard

16-BL Accessories: Crystal Sync Units with Variable Speed $325.00; Offset Viewfinder $600.00; Prime Lens Blimp housing, Excellent Condition $500.00; 400' Magazines $250.00. Visual Products, Inc. (440) 647-4999.

MOTION CONTROL SYSTEM Mechanical Concepts 32 foot I Beam. Pac-Sci motors installed. Cabled. No camera head or electronics. New Price $85,000. Sell for $35,000. (213) 460-4393.

EQUIPMENT FOR SALE

ARRIFLEX 16-BL Camera Package: 12x120 Angenieux Zoom Lens in Blimp housing, Matte Box, 2-400' Magazines, New Crystal Sync Unit with 5 speeds including Variable, New Battery with Charger, Cable, Case (Just Serviced)—$5,900.00; Nagra 4.2 with Case, Just Serviced $3,000.00 Both for $8,500.00 Visual Products, Inc. (440) 647-4999.

25-250MM COOKE ZOOM MARK I WITH PL MOUNT, BRACKETRY, W/CASE-$3,200. RONFORD FLUID 15 HEAD W/CASE $2,800. CEI VP II VIDEO CAMERAS $600. O'CONNOR 100C W/ QUICK RELEASE TOP $2,200. CARTONI C40 FLUID HEAD $4,200. JURGENS VIDEO DOOR, MODEL I FOR ARRI III $3,000. 6X6 ARRI MATTEBOX STD. W/3 STAGES $1,500. 6X6 ARRI MATTEBOX 3 STAGE W/ ONI SWING AWAY $1,600. JURGENS BL VIDEO ELBOW $2,300. 12-240 ANGENIEUX ZOOM $1,500. OTTO NEMENZ (213) 469-2774.

ARRI SR Extension Eyepiece $1,700.00; 16BL Magazines $250.00; 16BL 1000' Magazines $300.00; Arri S400' Magazines $200.00; Mitchell 1000' Magazines $300.00; ECLAIR ACL 200' Magazines $450.00. Visual Products, Inc. (440) 647-4999.

ARRIFLEX SR-II Camera Package: 10x100mm T*3 Zeiss, 2-400' Magazines, 2 Onboard Batteries, Charger, Right-hand Grip and Extras, Fully serviced with 6 month warranty $23,500.; Zeiss 10x100 T*2 also available. Visual Products, Inc. (440) 647-4999.

ZEISS 12-120 16/S16 MINT $10,500. CANON 8-64 LIKE NEW $13,000. ZEISS 10-100 T2 $7,500. ZEISS 8MM NEW STYLE (LIKE NEW) $3,300. ZEISS MUTAR 2X EXT. (LIKE NEW) $2,000. ZEISS 8MM OLD STYLE $1,200. ZEISS HS 12MM/16MM/25MM EACH $1,700. ZEISS 50MM $2,000. ZEISS 10-100T3 $1,500. ANG. 5.9MM MINT $1,500. ANGENIEUX 12-120MM OR 10-150MM $900. KILFIT 90MM MACRO 2.8 $750. TEL (212) 226-5658.

VISTAVISION PRINTER MOVEMENTS with 3rd pin. $3,500. 35mm movements $1,500. (213) 460-4393.

LENSES, Lenses and More Lenses: 16mm, 35mm and Super 16mm-Best Prices Anywhere! Call for complete list including pricing. Visual Products, Inc. (440) 647-4999.

ARRIFLEX Image Stabilizer Kit W/ Accessories $1,000.00 (440) 647-4999.

SR16/S16 SLIDING BASE PLATE $950. ARRI SWING AWAY MATTEBOX FROM $1,600. ARRI FF2 FROM $2,000. SR MAG $1,800. ARRI ZOOM RIGHT HAND-GRIP W/ MOTOR/BRACKET. 2 EXTENSION, MINT $2,700. SR. EXT. EYEPIECE $1,800. ARRI LITE FOLLOW FOCUS $1,400. ARRI LITE RODS W/ EXT. $280. ARRI S CONST. MOTOR $250. ARRI SR2 BUILT IN LIGHTEMETER $400. CINE 60 ZOOM CONTROL ANG. 12-120 $400. SR CAMERA BARNEY $200. SR FISHER 2X SPLITER BOX $200. SR SHOULDERBRACE $300. ARRI MAG CORE $40. TEL (212) 226-5658.

OPTICAL PRINTER CAMERA with VistaVision & 35mm movements. $15,000. (213) 460-4393.

16BL W/ VIDEOASSIST, 2 MAGS, 3 PRIMES, BLIMP $6,500. TEL (212) 226-5658.

Chapman / Leonard

Studio & Production Center

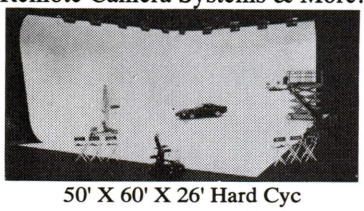
Orlando, Florida

'State of the Art in Quality and Service'

Fully Equipped 9000 Sq Ft Sound Stage

Chapman Cranes, Dollies & Pedestals

Remote Camera Systems & More!



50' X 60' X 26' Hard Cyc

Ask for a video on our facility!

USA Toll Free: (888) 33 STAGE (888) 337 8243

www.chapman-leonard.com

MAGLINER

Nalpak takes pride in expanding it's line of dollies and hand trucks with the famous MAGLINE Jr. and expanded line of NALPAK accessories, headlining with the carpeted adjustable 36 1/2 x 18" shelf. All Magline karts come pre drilled for up to four(4) carpeted shelves.

NALPAK

1937-C Friendship Drive ▪ El Cajon, California 92020

(619) 258-1200 ▪ FAX (619) 258-0925

CENTODUCATI PRODUCTION

BENJAMIN CENTODUCATI

Assistant - Cameraman

E.Mail, Art Hawk@ix.net.com.com.

Pager: (800) 980-0232

Miami, New York, Los Angeles, Milano, Paris

DU-ALL CAMERA

Rentals • Sales • Service

529 West 42nd Street

NYC 10036

Tel: (212) 643-1042

Fax: (212) 643-9335

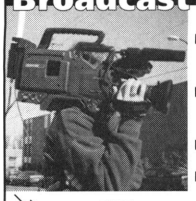
LOW BUDGET & STUDENT SPECIALS !!!

Expert Repairs on all motion picture cameras & lenses.

Super 8, 16mm, Super 16mm & 35mm Packages available.

Buy, sell, & trade used equipment.

Diversity Miniature Broadcast Microwave



- ►Eng, Remote Camera to Eng Van for Live Hits
- ►Full Motion Colour Video/Audio
- ►Video Signal Processing
- ►470 Lines @ 45+ db

Miller Wireless
3212 NW Ave. Suite C, Box 221
Bellingham, WA 98225 USA
tel: (360) 715.3328 **fax:** (360) 715.1239
e-mail: milwire@televar.com

RESTORATION SERVICES
FILM -- AUDIO/VIDEO
DIGITALLY ENHANCED/DE-NOISED
WRS Motion Picture and Video Laboratory
1000 Napor Boulevard, Pittsburgh, PA 15205
(412) 937-7700 fax: (412) 922-1020

TUFFPAK · MAGLINER · SEBERTECH · ACCU-CHART · VIDSLATE · BUCK TOOL · LARRY'S BAG · GOOSE BAG · QUICKSHIP · LEATHERMAN · PELICAN · HANDY MOVER · OL' SOFTY

NALPAK'S ALL NEW 16 PAGE CATALOG HAS FINALLY ARRIVED!
Get It Now
IT'S FREE!
To get a copy NALPAK
Fax: 800-4-NALPAK
Phone: 619-258-1200
Write: 1937-C Friendship Drive
El Cajon, CA 92020

Finding *Stock Footage*
with a friendly, easy call and a package that arrives quickly which is filled with perfection
***takes* ENERGY.**
THE LARGEST *and* MOST UNIQUE COLLECTION *of* ORIGINAL CINEMATOGRAPHY *in the* WORLD.
ENERGY
FILM · LIBRARY
1.800.IMAGERY *for* Your Most Valuable Resource
http://www.digital-energy.com

EQUIPMENT FOR SALE

ARRIFLEX SR-I Camera Packages: Zoom Lens, 2-400' Mags, 2 Onboard Batteries, Charger, Rt. Handgrip, Case fully serviced with 6 months warrantty from $14,500. Visual Products, Inc. (440) 647-4999.

35MM ECLAIR Cameflex CM3 package: (2) 400' magazines, (3) prime lenses, v/s motor, variable shutter, complete shooting package $3,900. Visual Products, Inc. (440) 647-4999.

SR2 (COMPLETE ARRI OVERHAUL), 2 MAGAZINES, ZEISS OR ANG. ZOOM, MATTEBOX 3X3, 2 BATTERIES, 1 CHARGER, 1 SUNSHADE, 3 DUSTCOVERS $22,000. TEL (212) 226-5658.

PERFECT SR1 PKG...x-tal 30 or 24fps, 3 mags, 3 batts, charger, extender eyepiece, var. speed control, Zeiss T2 10-100 auto iris w/ Croziel, Zeiss 9.5SS, Cooke 9-50 w/ Croziel, Ang. 10-150 w/ Croziel, Ang. 5.9, Canon F2.8 300mm, Sachtler 7+7 w/ carbon fiber legs and spreader, matte box, sliding base plate, all filters and rings, expedition paks and travel cases. $35K, OBO. Contact Gordy PHONE (203) 222-0409 FAX (203) 222-0551.

ELEMACK Cricket Dolly: (2) seats, studio and track wheels, unbeatable price, $15,000.—Call Visual Products, Inc. (440) 647-4999.

ZEISS 10x100mm T*2 Mk-II $9,500.; Zeiss 10x100mm T*2 $7,500.00; Zeiss 8mm T2.1 Mk-II $2,900.Visual Products, Inc. (440)647-4999.

CARTONI C-40 HEAD, STANDARD, BABY, HI-HAT, CASES, MINT $5,500. CARTONI 7X7 HEAD. STANDARD LEGS $1,800. TEL (212) 226-5658.

MITCHELL GEAR HEAD. Excellent condition. US$4,00. Contact Philip Linzey (604) 734-0939 FAX (604) 734-0994.

ECLAIR ACL II package, zoom lens, 2-400' magazines, French made, new battery, cable, case, $5700. Visual Products, Inc. (440) 647-4999.

ARRIFLEX 35 III Camera pkg. available. For details and pricing call Visual Products, Inc. (440) 647-4999.

INDEPENDENTS SPECIAL Used Arriflex Cameras and Lenses at Great Prices. All Gear in Excellent Condition. Never Rented. Contact Osvaldo Silvera, Jr. (305) 898-0039. http://members.aol.com/bettrduck/cameras/html

ARRIFLEX II-C with PL mount, mags, motor and misc. Call Visual Products, Inc. for Price (440) 647-4999.

ANGENIEUX 11.5x138mm Zoom $11,000.; Cooke 20x60 zoom $6,500. Call Visual Products, Inc. (440) 647-4999.

SR1 2 MAGAZINES, ZEISS OR ANG. ZOOM, MATTEBOX, 2 BATTERIES, CHARGER, SUNSHADE, FILTERS, DUSTCOVERS $12,500. (212) 226-5658.

AATON XTR Plus and XTR Standard camera packages with 2-400' magazines, right handgrip, PL mount, matte box, batteries, charger, plus extras. Two packages available. For details call Visual Products, Inc. (440) 647-4999.

ZEISS Super Speed Sets: 9.5mm, 12mm, 16mm, 25mm T1.3 From $7,500; Visual Products, Inc. (440) 647-4999.

SR2E (MINT) 2 MAGAZINES, ZEISS OR ANG. ZOOM, 8MM ZEISS, 5.7MM TEGEA, SUNSAHDE, 3 BATTERIES, CHARGER, 2 CASES $23,000. TEL (212) 226-5658.

STEADICAM 3A Arm, Excellent Condition, $7,000. Los Angeles (213) 466-6455 PAGER (213) 353-5435.

EQUIPMENT FOR SALE

PADDOCK Pro Sled System with Steadicam IIIA arm & vest (9) batteries, PAG charger, etc, etc. **LIKE NEW** $36,000. Arri SR1 packages in Mint condition with choice of lenses, etc. from 17,000. Arri SR2 Super 16 packages in stock. Please call for package prices CP-16R camera packages with Ang. 12-120mm lens fully rebuilt & repainted with 90 day warranty from $5,250. Zeiss 10-100mm T2 lens MK-I $7,500. MK-II **LIKE NEW** $10,500. Zeiss Distagon 16 & 25mm T*1.3 in Arri B mount. **LIKE NEW** $2,100 each. Arri extension finder $1,950. Arri SR 400ft mags like new $2,000. Kinoptic 5.7mm T2.3 super 16 lens in PL mount $2,000. Ang. 5.9mm in Arri standard mount $1,800. Many other items available call Derrick at Whitehouse A/V (805) 498-4177 or DW@WHITEHOUSEAV.COM or visit our WEB site at WHITEHOUSEAV.COM

FLUIDHEADS/Sachtler Video w/ Standard aluminum legs $4,500. O'Connor 100 $1,100; Ronford F7 underslung fluidhead overhauled $3,500; Several other Ronford heads available including 15, 15S and 15S with booster. Also available H.D. Ronford aluminum legs, or baby. Call Visual Products, Inc. (440) 647-4999.

WIDE Angle Prime Lenses: 8mm Zeiss T2.1 (new style) $2,900; 8mm Zeiss T2.4 $1,500; Kinoptic 9.8 $1,800; 5.9 Angenieux $1,500; 5.7 Kinoptik $1,500; 7.5mm Century $1,000; 18mm Schneider $750; Call Visual Products, Inc. (440) 647-4999.

SR1 SUPER 16/16 (OVERHAULED) 2 MAGAZINES, 10-100 ZEISS T3, 2 BATTERIES, CHARGER, 1 HANDGRIP $22,000. TEL (212) 226-5658.

CUSTOM-built 35mm effects camera. Double pin registered, intervalometer plus sync speeds to 50 fps. Contax lens mount (could be changed to another mount); used 100' internal load or 400' mags (2 included). As new US$17,000. PHONE (604) 939-1858.

ARRI SR II Super 16 Pkg: PL mount, 2 magazines, 2 batteries, charger, right handgrip case fully serviced with 6 month warranty $31,000. Visual Products, Inc. (440) 647-4999.

ECLAIR NPR Pkg: with zoom lens, 2-400' mags, crystal motor, new battery with charger, power cable, case $5,000. Visual Products, Inc. (440) 647-4999.

ARRI S, 3 PRIMES, CONST. MOTOR. $2,200. TEL (212) 226-5658.

UPRIGHT Moviola 35mm. Voice box missing, otherwise fine. Glue splicer included US$600. (604) 939-1858.

VISUAL PRODUCTS-CALL OR FAX FOR COMPLETE LIST. PH (440) 647-4999. FX (440) 647-4998.

HANDCRANK 35MM ALL TIME STEADIEST MOVEMENT, MATCHED SET OF 4 COOKE SPEED F2.0 EARLY LENSES FOR "THAT LOOK", $7,500. HANDCRANK WEB SITE, speakeasy.org/~samdodge.com E-MAIL samdodge@speakeasy.org (206) 723-3333.

ARRIFLEX S, S/B, M, M/B Packages available with or without lenses. Completely serviced. Call for details. Visual Products, Inc. (440) 647-4999.

MATTE Boxes: Arri 6.6x6.6 $2,000; Chroszeil 6.6x6.6 swing away $2,500; Arri 4x4 studio swing away $2,000; Chrosziel 4x4 lt. wt. swing away $2,000; Chroszeil 4x4 lt. wt. $1,200; Chroszeil 3x3 lt. wt. matte box $500. Visual Products, Inc. (440) 647-4999.

LARGE Dolly & Crane selection: Panthers, Elmech/Movietech, Elemack cricket, elemack spyder, tulip crane, moviola dolly, jibs, and more. For details call Visual Products, Inc. (440) 647-4999.

Stock Footage

Wildlife, Time Lapses, Nature, and more...

Contact us for your stock needs.

Greg Hensley PRODUCTIONS

970/927-9198

E mail: hensley@sopris.net

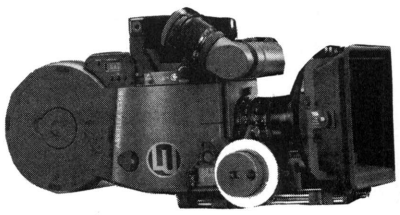
DON'T LOSE YOUR HEAD!

We will renew your Fluid Head and overhaul it completely to be BETTER THAN NEW! Write or call us for our super fast service and low prices.

2025 N.E. 151st St.
No. Miami Beach, FL 33162
(305) 949-9084,9085

NCE OF FLORIDA, INC.

Abrahamson Films



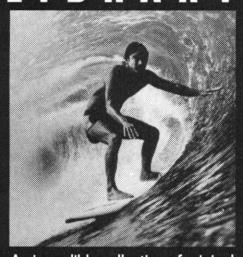
Arri 535 & 16 SR2

Production Facilities & Rental

310. 394.6039 Fax 310.395.0029

THE PRETTIEST PICTURES

LIBRARY



Incredible Aerials
Cities
National Parks
Statue of Liberty
Nature Scenes
Sunsets & Clouds
Seagulls/Birds
Storm Waves
Hawaii
Tahiti
The Bahamas
Hang Gliding
Surfing & Sailing
Ballooning
Soaring
Skateboarding
Dunebuggying
Skiing

An incredible collection of original cinematography available in all formats, cleared for your use.

MACGILLIVRAY FREEMAN

AERIAL & ACTION SPORTS LIBRARY

BOX 205, LAGUNA BEACH, CA 92652
RING 714/494-1055 FAX 714/494-2079
MacGillivray Freeman Footage is also represented by The Image Bank

BATTERIES

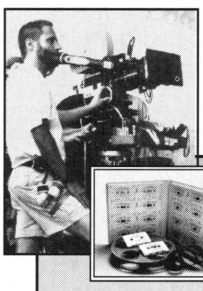
NEW!!!

HIGH CAPACITY / LIGHT WEIGHT

Nickel Metal Hydride Belts
Nickel Metal Hydride Blocks

Pro Power Products, Inc.

800 577-6769



FILM SCHOOL

with Dov S-S Simens

If you haven't Produced, Directed or Distributed an independent feature... ...You haven't taken this course

LOS ANGELES
Jun 20-21 or Jul 25-26

INTERNATIONAL TOUR
Toronto, Jun 6-7; Atlanta, Jun 27-28;
New York, Aug 1-2; San Francisco, Aug 15-16

Can't wait? Can't attend?
Audio Film School available.

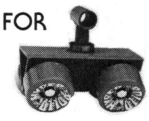
Only $289

HFI, PO Box 481252, LA, CA 90048
http://HollywoodU.com

HOLLYWOOD FILM INSTITUTE

800-366-3456

TRACK WHEELS FOR
DOORWAY DOLLY
$395.00



WILLY'S WIDGETS
4531 N. 87th Place
Scottsdale, AZ 85251

For Catalog send
2 First Class Stamps

MEXICO

LOCATIONS • EQUIPMENT
CREW • SERVICES

1-800-2-456-MEX
www.filmmexico.com

"EVERY SUBJECT KNOWN TO MAN!"

FISH FILMS FOOTAGE WORLD™

☆ INSTANT TURNAROUND
☆ FREE RESEARCH
☆ FREE CUSTOM DEMOS for Broadcast Projects!

Fax: 818-905-0301
Email: ftgworld@aol.com
Website: www.footageworld.com
Phone: **818-905-1071**

FISH FILMS FOOTAGE WORLD

150 fps MAG

Go Low Profile.

SL Cine introduces the lightest weight Steadicam-style mag built for the Arriflex 435 camera. Check out the 400' SL 435 magazine and see how SL Cine can lighten your load.

CINE SL INC. TEL:213.733.7088 FAX:213.733.1462

CINEAsst

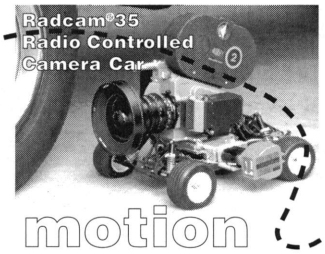
Used camera equipment with warranty!

T.(416) 975-2565 F.(416) 975-0895 www.cineasst.com

CINEMA TECHNOLOGIES™

use ***dye faded prints*** *with*
Kinotech™ projection filters

www.cinematechnologies.com



Sales & Rental
innoVision OPTICS, INC.

1438 Ninth Street Santa Monica, CA 90401-2707 Tel: 310/394-5510 Fax: 310/395-2941 **www.innovision-optics.com**

Did you know ?
People are looking
to us everyday...
Great products.
All in one place.
www.Filmtools.com

RIP-TIE®
Velcro® Cable Wraps
Locks onto Cord
The Rip-Tie Co. 800•348•7600
P.O. Box 77394 San Francisco, CA 94107

MOTION PICTURE EQUIPMENT SERVICE
Aaton, Arri, Bolex, CP, Eclair,
Switar, Zeiss, Angenieux, etc.
SMS PRODUCTIONS, INC.
1327 W. Washington Blvd. #103 Chicago, IL 60607
(312) 738-0747 Fax (312) 738-0564

SUNPATH
Sun Tracking Software
39,000 Locations World Wide
Suunto Compasses & Clinometers
WIDE SCREEN SOFTWARE
818-764-3639 widescreen@pobox.com
www.pobox.com/~widescreen

Rain & Dust Covers
For all 16mm & 35mm motion picture cameras
•Attach to mattebox with hook'n loop fabric
•Made of clear vinyl
CAMERA ESSENTIALS
2620-1/2 Hyperion Ave.
Los Angeles, CA 90027
✆ 213-666-8936 Fax 213-666-0214 *Call for pricing*

Film&Video
STOCK SHOTS
888.4.FOOTAGE
FAX 818.760.3294

PROFESSIONAL
POLAROID* CAMERAS
FOR EXPOSURE AND LIGHTING EVALUATION
SOLD-SERVICED-MANUFACTURED
CALL FOR COMPLETE INFORMATION
800-468-3399 - 360-887-1555
FAX 360-887-1549
FOUR DESIGNS CO.
20615 NE 22nd AVE. RIDGEFIELD, WA 98642
*POLAROID is a registered trademark of the Polaroid Corp.

PROTECT YOUR EQUIPMENT
USE THIS HARD MOLDED LEATHER CASE FOR YOUR MINOLTA LIGHT METERS.
PRICES FROM $95 TO $140
MADE BY A CAMERAMAN
FOR CAMERAMEN
CALL LEATHERCAM AT:
(213) 463-4584 FAX: (213) 463-4142

SCOTT DITTRICH FILMS
ACTION
STOCK FOOTAGE LIBRARY
Surfing
Kayaking
Mt. Biking
Rock Climbing
Snowboarding
Skateboarding
Nature
Natural Disasters & Pollution
310•459•2526 • FAX 310•456•1743

CINERIC INC.
•Titles, Opticals & Special Effects
•High Resolution Digital Film Scanning & Recording
•Digital Effects & Image Processing
•Film Preservation & Restoration
•35mm Blow-ups
•Video to 35mm Film Transfer
630 Ninth Avenue
New York, NY 10036
212.586.4822
212.582.3744 fax
info@cineric.com
http://www.cineric.com

This Publication is Available in Microform
For complete information write to University Microfilms International, Dept. F.A. 300 N. Zeeb Road, Ann Arbor, MI, 48106, USA or Dept. F.A. 18 Bedford Row, London, WC1R 4EJ, England.

EQUIPMENT FOR SALE

VISUAL PRODUCTS-WARRANTY ON ALL USED EQUIPMENT (440) 647-4999.

2 ARRIFLEX SR-II Camera Packages: 10-100mm T*2 Zeiss, Extension eyepiece, 3-400' Magazines, ARRI Follow focus FF-2, ARRI 4x4 Matte box, Sliding base plate, ARRI speed control, Right-hand grip, Charger, 2 Onboard Batteries, new cases and extras, mint condition! Each Package $28,000. **Call** (718) 636-5350.

BOLEX Underwater Housing for most Bolex cameras. Made in Switzerland-excellent condition $1,000. Call Visual Products, Inc. (440) 647-4999.

PHOTOSONICS 4C Camera - Call Visual Products, Inc. for details (440) 647-4999.

CANON 600mm T4.5 PL mount or B mount $3,500. 2x extenders also available. Call Visual Products, Inc. (440) 647-4999.

ARRI 35 BL I Pkg. with B or PL mount, 2-400' magazines, many accessories. Priced from $17,000. Call Visual Products, Inc. (440) 647-4999.

ARRIFLEX 35BL III 2-400' Mags, 2-1000' Mags. Rt. Handgrip, battery, charger, video option, cases and other accessories available. $63,000. Visual Products, Inc. (440) 647-4999.

LARGE Bolex selection: H16R, Rex5, SBM, EBM, EL cameras, Call for Details, Visual Products, Inc. (440) 647-4999.

VISUAL PRODUCTS-LARGEST SELECTION OF USED MOTION PICTURE EQUIPMENT, AATON TO ZEISS. PH (440) 647-4999. FX (440) 647-4998.

MITCHELL BNCR Camera package, a very complete package with lenses. Excellent condition $13,500. Mitchell S35R Camera package with Fries motor and magazines, $15,000. Call Visual Products, Inc. (440) 647-4999.

REPRESENTING THE WORLD'S LARGEST INVENTORY OF PRE-OWNED PROFESSIONAL MOTION PICTURE EQUIPMENT... Arriflex, Aaton, Moviecam cameras & accessories. Generators, cranes, dollies, heads, tripods, transportation vehicles, Etc. Over 1,200 used H.M.I. & incandescent lights for sale. Anamorphic lenses and anamorphic rear of zoom adapters for sale & rent...22mm, 35mm, 40mm, 50mm, 75mm, 100mm, & 150mm***Call or fax Ken Rich for the complete list of used equipment. The Power Broker. PHONE (714) 721-1911...FAX (714) 721-1910. **Email:** powerbroker@bbs.ocis.com

PRISTINE USED EQUIPMENT. THE NEW PRO VIDEO & FILM EQUIPMENT COMPANY. TOLL FREE (888) 869-9998; (972) 869-9990.

USED EQUIPMENT FOR THE 21ST CENTURY. CALL BILL REITER. THE NEW PRO VIDEO & FILM EQUIPMENT COMPANY. (888) 869-9998.

OVER 3,000 USED ITEMS IN STOCK. THE NEW PRO VIDEO & FILM EQUIPMENT COMPANY. (888) 869-9998.

FRIES MITCHELL CAMERA W/FRIES MOTOR AND CINEMATOGRAPHY ELECTRONICS HIGH SPEED BASE CONVERSION, B&W CCD VIDEOTAP, 3-1000FT MITCHELL MAGAZINES, 2-30 VOLT BLACK BATERIES. $23,000. OTTO NEMENZ (213) 469-2774.

27 YEARS EXPERIENCE, OVER 40,000 SATISFIED CUSTOMERS. CALL BILL REITER FOR USED EQUIPMENT. THE NEW PRO VIDEO & FILM. (888) 869-9998.

EQUIPMENT FOR SALE

ARRI SR Left Handgrip $380; Cooke 9x50mm zoom $5,000. Call Visual Products, Inc. (440) 647-4999.

SYNC SOUND: Super-8/16mm Crystal Controls, Pro-Walkman sync recorders, Resolvers, Bloopers. Since 1975. THE FILM GROUP. (860)529-1877. http://users.aol.com/fmgp

PROFESSIONAL EQUIPMENT. ALL USED. ALL GUARANTEED. ALL THE TIME. CALL BILL REITER. THE NEW PRO VIDEO & FILM. (888) 869-9998.

ACCESS www.advancecamera.com for our latest rental equipment.

INDEPENDENTS: Aaton pkg w/10-100T2, mags $750./week. Ships all cont. US, **Cine Rentals** (800) 676-CINE or (317) 923-4459.

ABEKAS THRU SONY. ARRI THRU ZEISS AND ALL BRANDS IN BETWEEN. THE NEW PRO VIDEO & FILM EQUIPMENT. CALL BILL. (888) 869-9998.

USED MOTION PICTURE EQUIPMENT Arriflex B1.4 & BL4S Packages, 16mm SR1 & SR2 Mitchell Fries HS and also a Low Budget Mitchell BNC Sync Sound Camera. CPT T5.7 "Superscope Lens" and much more. To check out our complete list visit our Web Site at **www.cptny-atl.com** or give us a call at **(718) 424-1600.**

WHAT'S NEW IN USED EQUIPMENT? ASK BILL REITER. THE NEW PRO VIDEO & FILM EQUIPMENT COMPANY. (888) 869-9998.KINOPTIK APOCHROMATS, LENSES 1.9MM F/1.9-1000MM F/8, ARRI/PL, AATON, C, OTHERS. HEITZ SERVICE (718) 565-0004 FAX (718) 565-2582.

THE NEW PRO VIDEO & FILM EQUIPMENT COMPANY, INC. USED EQUIPMENT. TOLL FREE (888) 869-9998.

WANTED

WANTED: CAMERAS 35MM & 16MM, SOUND EQUIPMENT, FLUID HEADS, LIGHTING, ETC. Best cash prices paid. Consignment also available. Contact Pete Anway, BIRNS & SAWYER, INC. 1026 N. Highland Ave., Hollywood CA 90038, (213)466-8211.

Wanted—Aaton camera technician: Experienced camera technician wanted for in house service dept. Lens repair experience also very helpful. Top salary and benefits available for the right person. Escape the big city rat race and come work with friendly down to earth people in a beautiful part of the country. Send resume to Visual Products, Inc. 46994 Peck Wadsworth Rd., Wellington, Ohio 44090 PH (440) 647-4999.

WANTED: Feature Films. IFP/West seeks completed feature films for its New Visions screening program. Sponsored by the Eastman Kodak, Co. and the Writers Guild of America, New Visions screens the best of new, undistributed independent film for the L.A. film community. For application and information, call (310) 475-4379 x17 or www.ifpwest.org

CASH FOR YOUR EQUIPMENT NOW! MOTION PICTURE EQUIPMENT 16MM OR 35MM WANTED: CAMERAS, LENSES, TRIPODS, DOLLIES, CRANES, LIGHTING, EDITING. VISUAL PRODUCTS, INC. PH (440) 647-4999 OR FAX LIST TO (440) 647-4998.

KINOPTIK APOCHROMATS, LENSES 1.9MM F/1.9 - 1000MM F/8, HEITZ SERVICE (718) 565-0004 FAX (718) 565-2582.

ZGC for Optex

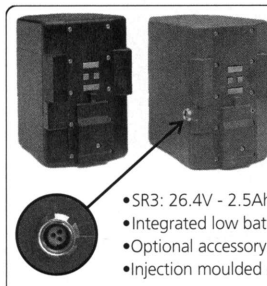
in USA and Canada

Please call us for specs on the Periscope/Borescope system, the 14.5-480mm and 10.5-210mm Super 16 zooms, the Super 16 T2 wide angles (4, 5.5, 8mm) and all the other Optex products.

Cooke ZGC

(973) 335-4460 • Fax: 335-4560 • Or see us at www.zgc.com

!!ATTENTION CREW!!
ANY PRODUCTION, ANY WEATHER, OUR BAGS *WILL* ENDURE
FREE CATALOG - 800.255.2477
ONLINE CATALOG - www.theblackbag.com
THE BLACK BAG CO.



DOUBLE Your SR3 or SR2 On-Board Power!

- SR3: 26.4V - 2.5Ah; SR2: 14.4V - 3.0Ah!
- Integrated low battery indicator
- Optional accessory connector
- Injection moulded construction

Lente Equip Film & Video inc.
Tel: (416) 406-2442
Fax: (416) 406-2443
email: info@lentequip.com
www.lentequip.com

New 11x MicroFinder
THE LATEST IN DIRECTOR'S VIEWFINDERS
- Dial-in aspect ratios: TV, 1.37, 1.66, 1.77, 1.85, 2.35
- 16, S16, 35, Ana, Video
- 18-200 mm (35)
- 8.5-94 mm (16)

- No masks to lose
- Weight: 4.4 oz (125 g)
- Shown actual size (2.2"/56mm long x 1.62"/42mm dia.)

SelectImage Corp.
25763 Robertson Cres., Langley, B.C. Canada V4W 1W4
604-856-6760
Fax: 604-856-6781 E-mail: gsohy@compuserve.com

MY DAD SAYS...
"TUFFPAK™ IS FIRST IN INNOVATION AND DURABILITY"
THE ULTIMATE IN TRIPOD TRANSPORTATION
LIFETIME WARRANTY

FIFTEEN YEARS OF FIELD EXPERIENCE
SIXTEEN ~~FOURTEEN~~ SIZES • CUSTOM COLORS & LABELING
NALPAK
1937-C Friendship Drive • El Cajon, CA 92020
(619) 258-1200 • Fax: 1-800-4 NALPAK
E-mail: nalpak@nalpak.com
Web site: http://www.nalpak.com/nalpak

Wet Location Camera & Lighting Rentals

800-580-8373
PACE
www.pacetech.com

HAVE A PROBLEM WITH YOUR SUBSCRIPTION?

Now you can reach our **circulation department** directly by calling **(213) 969-4344** between 9:00 a.m. – 4:00 p.m. *(pacific standard time),* monday – friday.

NOT AVAILABLE ON NEWSSTANDS!

American Videographer

FREE TO ALL AC SUBSCRIBERS!

There's still time to begin or renew your subscription and receive the next exciting issue of *American Videographer* with the September issue of *American Cinematographer.*

This is just one of the many advantages of being an *AC* subscriber. Don't be left out! Call, fax, E-mail or mail your request today.

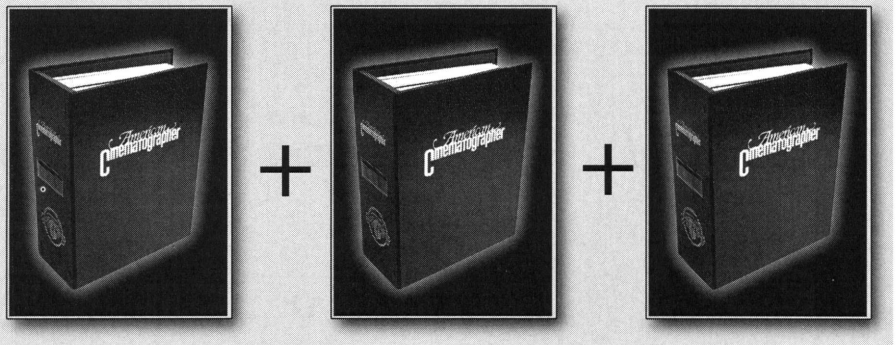
See bound-in subscription card for details.

SUBSCRIBER Benefits: Special renewal rates • Personal subscriber PIN codes to access exclusive areas of our Web site • Lower gift subscription rates • Discounts on books and merchandise, and much, much more!

American Cinematographer

Buy 3 Binders FREE Get the 4th

PLACE CINEMA HISTORY AT YOUR FINGERTIPS



=FREE BINDER

• The new-designed *American Cinematographer* binders help put great, inspirational articles at your fingertips and will protect your valuable issues for many years to come. And for a limited time, if you order three binders, we will give you an extra one FREE of charge. Each 9 1/2" x 4 1/2"x12" binder can hold up to 12 issues and has the *AC* and American Society of Cinematographers emblems printed in silver on its durable black vinyl covers. Don't Miss out on this incredible new offer—order your *AC* binders today at the low price of $15.00 each, plus S&H.

• Please refer to order form in issue when ordering by mail and write "Special Binder Offer" on the order Form.

• To order by phone:
(800) 448-0145 (U.S. Only)
(213) 969-4333
Fax: (213) 876-4973

DON'T MISS OUT ON THIS INCREDIBLE NEW OFFER

WANTED

BEAULIEU SUPER 8 CAMERAS WANTED !! Will pay up to $300 cash for functioning & non functioning Beaulieu cameras. Call Doug at (818)848-5522, 9:30-5:30.

WANTED: STEADICAMS, CAMERAS, LENSES, TRIPODS, etc. for cash, consignment, or trade. Derrick, WHITEHOUSE A/V (805) 498-4177 FAX (805) 499-7947. WHITEHSAV@AOL.COM

SERVICES AVAILABLE

CP-16R overhaul, rebuild and repaint, parts, labor, 90 day warranty: $995. Also call us for lens service. WHITEHOUSE A/V (805)498-4177. FAX (805) 499-7947.

COMPLETE 16MM PRODUCTION PACKAGE RENTAL camera, sound, lighting, dolly, grip. Ideal for most applications, priced for the lowest budgets. **SILVER SAGE PRODUCTION SERVICES (818)557-0550.**

QUALITY CAMERA SERVICE: Complete repair & machine shop, parts dept., & top experienced technicians are available at Birns & Sawyer, Inc., to service your camera, lenses, tripods & related equipment. Send in your equipment for an estimate to our Service Dept. (213)466-8211. Peter Anway, BIRNS & SAWYER, INC., 1026 N. Highland Ave., Hollywood, CA 90038.

BOLEX-ECLAIR factory trained service, equipment & accessories available at **PROCAM,** 22048 Sherman Way Ste. 105, Canoga Park, CA 91303. PHONE (818) 346-1292, FAX (818) 346-7712.

SITUATIONS AVAILABLE

Wanted—Aaton camera technician: Experienced camera technician wanted for inhouse service dept. Lens repair experience also very helpful. Top salary and benefits available for the right person. Escape the big city rat race and come work with friendly down to earth people in a beautiful part of the country. Send resume to Visual Products, Inc. 46994 Peck Wadsworth Rd., Wellington, Ohio 44090 PH (440) 647-4999.

CENTURY PRECISION OPTICS has an immediate opening for two people in our sales department to handle telephone and walk-in counter sales of professional film and video products. Prefer at least 2 years retail/wholesale sales experience in video products or a closely related field such as video equipment. Knowledge of film/video production is a plus. Willing to train someone with knowledge in video/film or photographic production techniques who is interested in a sales career. Salary commensurate with experience. Fax or mail resume with salary history to: **CENTURY PRECISION OPTICS,** 11049 MAGNOLIA BLVD, N. HOLLYWOOD, CA 91601, ATTN: JEFF GIORDANO, FAX: (818) 505-9865.

CAMERA operators wanted to train on BODYCAM. Bodycam Operators Association (818) 989-5223.

D.P.'s and Videographers! We're looking for talented, experienced Camerapersons to shoot for our high quality national, and international clients. If you are L.A. based, or moving to Los Angeles, send your resume and tape to: **Marshall/Stewart Productions,** P.O. Box 762 Woodland Hills, CA 91345. Call (818) 348-8933 for more info.

QUALITY LENS SERVICE

Fujinon ■ Canon ■ Angenieux ■ Cooke ■ Zeiss ■ Schneider ■ Etc.

Now Available From:

WHITEHOUSE AUDIO VISUAL
2696 Lavery Court, No. 8
Newbury Park, CA 91320
(805) 498-4177 FAX (805) 499-7947

HIGH QUALITY MOTION PICTURE PROCESSING

We Buy and Sell Raw Stock

COMPARE OUR LOW PRICES!
35mm Color Neg. .10¢ per ft.
*16mm Color Neg. .10¢ per ft.
35mm Daily Prt. .13¢ per ft.
Video Services Available
**Including Super 16mm*

RGB COLOR LAB
816 N. Highland Ave.
Hollywood, CA 90038
213/469-1959

EXPERT MOTION PICTURE CAMERA REPAIR and MODIFICATIONS

Cinema Engineering Co. 7243 Atoll Ave. Suite A, North Hollywood, CA 91605
(818) 765-5340 *Since 1975* **FAX (818) 765-5349**

16mm 35mm 65mm | *No job too big, no job too small* | 70mm Vista Vision

WIRELESS VIDEO

BE-320 Miniature Microwave

Introducing Premier Wireless' exciting new Wireless Video Communications Systems. Designed with proprietary technology that provides performance superior to other similar products. Professionals now have the ability to distribute video on either fixed or mobile applications with a system that is lightweight, compact, installs in minutes and is low cost.

Features include full colour video and audio, four user selectable channels, range to 2.5 miles (consult Miller for longer range options), NTSC or PAL signal formats and can easily attach to NPI or Anton Bauer battery packs.

The applications are endless, Live Broadcast, Video Conferencing, Distance Learning, Video Assist, Security and Surveillance and anywhere else wireless video distribution is needed.

MILLER PROFESSIONAL PRODUCTS
1055 Granville Street, Vancouver, BC V6Z 1L4
Tel: 604/685-4654 **Fax:** 604/685-5648

SPORTS Is Our Middle Name

Exclusive Footage: (35mm, 16mm, Video)
•U.S. World Cup Soccer • Olympics
•Professional, extreme, & recreational sports

Phone: 212-721-2800
ACTION SPORTS ADVENTURE
Fax: 212-721-0191

AMERICA'S PREMIER BOLEX DEALER
BOLEX SALES AND SERVICE
SOLE DISTRIBUTOR of NEW H16 RX-5
QUALIFIED DEALER INQUIRIES WELCOME
Call or Write for Complete Listing of New & Used
MOTION PICTURE EQUIPMENT
CHAMBLESS CINE EQUIPMENT
RT 1. BOX 1595 . HWY 52 W . ELLIJAY, GA 30540 USA
TEL# 706-636-5210 FAX# 706-636-5211

Advertiser's Index

A&J Cases 130
Aaton 16-17
AC 136, 156, 160, 162
Abrahamson Films 159
Action, Sports 163
Advanced Camera 136
Arriflex 11
Avid 13

Backstage Equipment 151
Band Pro 55
Benjamin Centoducati 157
Birns & Sawyer 27, 127, 155
Black Bag Co., The 161
Bogen Photo 96, 132, 150
Boston Camera 138

Camera Control 97
Camera Essentials 150, 160
Camware 160
Centropolis 121
Century Precision 19
CFI 61
Chambless 163
Chapman Studio 133, 157
Chesapeake 152
Chimera 148
Cine Magic Int'l 63, 96
Cine South 159
Cine Video 122
CineAsst 90, 154, 159
Cinekinetic 1, 154
Cinema Engineering 163
Cinema Products C-2
Cinema Technologies 159
Cinematography Electronics 146, 148

Cinemills 30
Cinequipt 155
Cine Radio 68
Cineric 160
Clairmont 8-9
CSC 15

Deluxe 37
Denecke 22
Doggicam 152
Dittrich Films 160
Du All Camera 157

Eastman Kodak 47
Egripment 83
ELS 146
Energy Film 158
ESS 39
Eurogrip 7

Film & Video Stock 160
Film/Video Equip. 146
Fish Films 159
Fletcher Chicago 72
Flying Cam/Moving-Cam 150
Four Designs 160
Fries Engineering 142
Fuji Motion Picture 93

Geo Film 142
George Paddock 29
Glidecam Industries 32
Great American C-4
Greg Hensley 159

Hand Held Films 14
Hollywood Film Inst. 159

Hydroflex 73

IBC 119
IDA 120
Ikonographics/Image G 65
Innovision 159
Int'l. Film 151

J.L. Fisher, Inc. 98
John Leeward 85

K&H Products 72
K 5600 85
Kart-A-Bag 114
Kenworthy 92
Kino Flo 129
Kish Optics 90

Leather Cam 160
Lee Filters 147, 149, 151
Lee Utterbach 38
Lent Equip 161
Lightline Electronics 70
Lightning Strikes 66
Lights Up Industries 45
Lightstorm Entertainment 101
London Int'l Film 152
Lowel Light 33
Lynx Robotics 142

MacGillivray 159
Mamiya America C-3
Mazilview 70
MCRS 143
Media Logic 148
Miller Canada 163
Miller Fluid Heads 6

Miller Wireless 158
Mole Richardson 69
Movie Camera 113
Movie Tech 112
Musco Mobile 50

Nak Group 69
Nalpak 20, 69, 144, 157, 158, 161
NCE of Florida 159
New Mexico 130
New York Film 57
Norris Film 149

O'Connor 107
Otto Nenemz 51

P.E.D. Denz 25, 141
Pace Technologies 161
Panavision Corporate 86-87, 103
Panther GMBH 12
Paramount Pictures 99
Photo-Sonics 147
POV/MAT 115
Power Gems 131
Pro Power 159

Quantel 95

RGB Color Lab 163
Rip Tie 160
Ryerson Polytechnic Univ. 140

Sachtler 31
Schneider Lenses 23, 84
Schumacher 67
Select Image, The 161
Serious Gear 26

Showbiz Expo 137
Siggraph 123
SL Cine 159
SMS 160
Spacecam 105
Spectra Cine 84
Stanton Video 114
Steadicam Operators 6
Steenbeck 38
Sunray 10
Super 8 Sound 147

Thomas Special Effects 32
Trovato 98
Tyler Camera Systems 14

UCLA Extension 139

Vancouver Film 92
VFG/PLC 91
Videosmith 132
Visual Products 128

Weaver/Steadman 2, 4, 5
Wescam 77
Whitehouse 163
Wide Screen 160
Willy's Widgets 159
WRS Motion 158

Xenotech 71
Xtended Camera 79

ZGC, Inc. 21, 81, 111, 122, 138, 145, 149, 161

In Memoriam

Jean Wade Turner, the associate editor of *American Cinematographer* magazine for close to a decade ending in 1991, passed away recently after a brief illness. Jean's contributions to this magazine and its parent organization, the ASC, were legion.

Jean's upbringing in Depression-era Montana formed her worldview, but she was anything but old-fashioned. A mile-wide independent streak — a characteristic common in the American West among those of her generation — gave Jean the confidence and industriousness to take on any job.

And work she did. In many cases, it was work that had not previously been considered women's work. Prior to World War II, you could have found Jean in Denver, Colorado, hanging by a strap from "high-rise" buildings, washing the windows. Later, she worked as a photographer for the Armed Forces at an Air Force base in La Junta, Colorado. Her job was to arrive first on the scene of test-flight crashes and document the carnage photographically. With her then-husband, newspaperman Tom Wade, she worked at a range of small-town newspapers in the West. Jean did it all: photographer, reporter, editorial page writer-editor, copy editor and news editor.

Eventually she settled in at the Amarillo, Texas *Daily News and Globe Times,* where she became one of the first female news editors in the country. The job consisted of overseeing a mixed crew of writers, ranging from college interns to old pros; making sure they delivered the goods on time; editing the resulting mass of copy; writing headlines; and arranging articles in their proper places amid the ads to meet the late-night deadlines.

Jean crafted a long, successful career in Amarillo, raised her children, Nora and Thomas Kent, and was widowed in 1974. Then, at a time when most people would opt to stay put, Jean made another audacious move in 1979 — pulling up the stakes completely and moving to Hollywood. Measured in miles, the distance is not that great, but culturally it was akin to moving to another planet. The reasons for the move were many, but the most important was George Turner, Jean's new husband. While working on his book *The Making of King Kong,* George had met Linwood Dunn, ASC. Dunn knew talent when he saw it, and offered the Turners work.

Photo by Chris Pizzello

Soon, Jean's talents were being put to use at the American Society of Cinematographers headquarters on North Orange Drive, a block from the famous Grauman's (now Mann's) Chinese Theater. Before long, her title was associate editor of *American Cinematographer* magazine, but she never hesitated to take on many duties that are not even hinted at by that title. For a time she handled all advertising, display as well as classified. Her work involved dealing with printers and other vendors, the securing of copyrights, paying contributors, preparing monthly reports to the editorial committee, and obtaining estimates. She was also an assignment editor who hired freelance writers to cover stories that could not be handled by in-house personnel.

Besides her magazine duties, Jean was a publicity director for the ASC and *AC* who wrote and disseminated reams of press releases. Between issues of the magazine, Jean was the driving force and keen-eyed editor behind many of the ASC's most popular books, including the sixth edition of the *American Cinematographer Manual,* the *American Cinematographer Video Manual, The Cinema of Adventure, Romance and and Terror,* the *ASC Treasury of Visual Effects,* and *Special Effects: Wire, Tape and Rubber-Band Style.*

Jean was also a charter member of the ASC Awards Committee, the valiant group which brings us the Annual ASC Awards for Outstanding Achievement in Cinematography. More than a decade ago, there were many naysayers. Jean's determination and hard work helped make the dream a reality. This year's event was attended by more than 1,400 people, and the show is now known as "biggest night of the year" for cinematography.

In 1991, Jean left ASC and *American Cinematographer* to spend more time with her family, especially her newborn grandson, Benjamin Lee. Characteristically, she didn't sit still long. Soon she was an integral part of yet another publication, *The Basix,* a startup newsletter for the leisure entertainment industry. Not surprisingly, *The Basix* became a widely read, successful publication. When she died, Jean was also associate editor of the Urban Land Institute's *Entertainment Zone,* for which she penned monthly stories on real estate and entertainment.

For more than a decade, Jean Turner served the world of cinematography above and beyond the call of duty. Each time we pick up *American Cinematographer,* look up some information about a lens in the Film Manual, or enjoy an evening with motion picture photography's brightest lights, we owe her a debt of gratitude. Thanks, Jean. ■

In Memoriam

Charles Bryant Lang, Jr., ASC, an outstanding director of photography for more than four decades, died on April 3. Those who worked with him recall that the tall and modest Lang was invariably the calmest, best-looking, and best-dressed man on the set.

In 1933, Lang received an Academy Award for his camerawork on Paramount's *A Farewell to Arms,* starring Helen Hayes, Gary Cooper and Adolph Menjou. Some of the unusual techniques he utilized for this picture have been imitated often, particularly a long take of a patient on a gurney being wheeled from an ambulance and through long corridors to an operating room — as seen from the POV of the prone patient. It is still one of the most dazzling examples of camera personification in any movie. This was Lang's only Oscar win, but 18 nominations received between 1931 and 1973 make him the all-time champ for Academy recognition.

On February 24, 1991, long after his retirement, Lang received a Lifetime Achievement Award from the American Society of Cinematographers.

Lang was born on July 4, 1901, in Bluff City, Utah. At the age of 17, he went to work in the film lab at Realart Studio in Hollywood, where his father was a lab technician. The company soon became a part of Paramount-Famous Players-Lasky. One of Paramount's leading cinematographers, L. Guy Wilky (a founding member of the ASC), took note of Lang's cool professionalism and hired him as an assistant cameraman. His first screen credits were as co-cinematographer with Jack Stevens, ASC on *Night Patrol* (1926) and with Allen Siegler, ASC on *The Loves of Ricardo* (1927).

At this time, Lang also worked as an Akeley cameraman, then a specialized category for cameramen who photographed outdoor action sequences with Akeley's special gyroscope-mounted "pancake" cameras. Returning to Paramount, he made his debut picture as solo first cameraman on *Ritzy* (1928).

He was then assigned to an early "part-talkie," *Shopworn Angel* (1928), directed by Dorothy Arzner. Early in production, Arzner told Lang that if his photography didn't improve quickly, he was off the picture. He analyzed the situation and decided that his error was in trying to imitate the lighting and composition of other cinematographers whose work he admired. He immediately began to contribute fresh ideas of his own, and Arzner liked what he did. He also got high marks for the circus drama *Halfway to Heaven* (1929) and *Innocents of Paris* (1920).

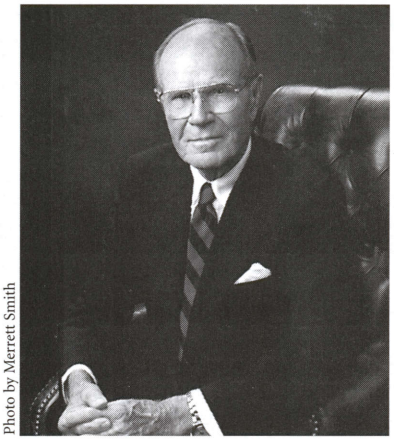


Photo by Merrett Smith

In 1931, Lang received an Academy Award nomination for the drama *The Right to Love*. Two years later, he was selected to shoot for *A Farewell to Arms*. Co-star Helen Hayes, "the first lady of the stage," was a lovely woman but not a "movie star" type, and the Paramount executives trusted Lang to make her look beautiful. He used subdued light on her face, backlit her hair softly, employed a bit of diffusion and captured her natural beauty on film. Although critics of the time seldom commented on photography, one was perceptive enough to call the film "an example of flawless cinematographic artistry for which Charles Lang will always be remembered."

Paramount, which was widely admired for the artistry of its settings and photography, signed Lang to a contract which lasted for 20 years. The major studios all had a distinctive "look," and the much-emulated Lang style of lighting became heavily identified with Paramount throughout the Thirties and Forties. In 1951, he began his 21 years as a freelance cameraman, adapting easily to working with various new color emulsions, three-camera Cinerama, anamorphic formats, and VistaVision.

Lang's other Academy-nominated films at Paramount and on loan-out were *Arise My Love* (1940), *Sundown* (1941, United Artists), *So Proudly We Hail* (1943), *The Uninvited* (1944), *The Ghost and Mrs. Muir* (20th Century Fox), and *A Foreign Affair* (1948). His freelance nominations came for *Sudden Fear* (1952), *Sabrina* (1954), *Queen Bee* (1955), *Separate Tables* (1958), *Some Like It Hot* (1959), *The Facts of Life* (1960), *One-Eyed Jacks* (1961), *How the West Was Won* (1963), *Bob and Carol and Ted and Alice* (1969), and *Butterflies are Free* (1972).

Lang recalled that he was director of photography on 89 feature films, but we have found at least 25 additional credits for him, plus two TV features for the General Electric Theater. His body of work — consisting almost entirely of "A" pictures — includes *The Cat and the Canary, The Ghost Breakers, Ace in the Hole, Gunfight at the OK Corral, The Magnificent Seven,* and *Charade*.

Charles Lang wasn't given to speechmaking, but he once told an interviewer that "You've got to always strive to be better. I was never really satisfied with my work. A lot of people have natural talent — that's not enough. I always believed I could do better."

Lang is survived by his daughter, Judith Lang, three grandchildren, and four great-grandchildren. A private memorial service was held on April 23. ■

American Society of Cinematographers Roster

J U N E 1 9 9 8

OFFICERS -1998

Woody Omens, President

Victor J. Kemper, Vice President

Steven B. Poster, Vice President

Laszlo Kovacs, Vice President

Howard A. Anderson, Jr., Treasurer

John Bailey, Secretary

Gerald Perry Finnerman, Sergeant-at-Arms

MEMBERS OF THE BOARD

Howard A. Anderson, Jr.
John Bailey
Stephen H. Burum
Allen Daviau
George Spiro Dibie
Gerald Perry Finnerman
Victor J. Kemper
Laszlo Kovacs
Woody Omens
Steven B. Poster
Robert Primes
Owen Roizman
John Toll
Haskell Wexler
Vilmos Zsigmond

ALTERNATES

Roger Deakins
Linwood G. Dunn
John C. Hora
Robert F. Liu
Donald M. Morgan

ACTIVE MEMBERS

Thomas Ackerman
Lloyd Ahern, II
John A. Alonzo
Herbert Alpert
Howard Anderson
Monroe Askins
Tony Askins
Charles Austin
James Bagdonas
King Baggot
John Bailey
Michael Ballhaus
Andrzej Bartkowiak
John Bartley
Frank Beascoechea
Andres Berenguer
Manuel J. Berenguer
Carl Berger
Ralf Bode
Haskell Boggs
Richard Bowen
Edward R. Brown
Joseph Brun
Don Burgess
Stephen H. Burum
Wilmer C. Butler
Taylor Byars
Bobby Byrne
Russell Carpenter
Gu Changwei
Michael Chapman
Curtis Clark
Jack Cooperman
Charles Correll
Jack Couffer
Vincent G. Cox
Dean R. Cundey
Allen Daviau
Roger Deakins
Jan DeBont
Thomas Del Ruth
Caleb Deschanel
George Spiro Dibie
Ernest Dickerson
Victor Duncan
Bert Dunk
Linwood G. Dunn
John Dykstra
Richard Edlund
Fred Elmes
John Elsenbach
Geoffrey Erb
Don E. FauntLeRoy
Gerald Feil
Gerald Perry Finnerman
John C. Flinn, III
William A. Fraker
A.C. Francis
Tak Fujimoto
Ron Garcia
Maury Gertsman
James M. Glennon
Stephen Goldblatt
Paul Goldsmith
Victor Goss
Jack Green
Adam Greenberg
Robbie Greenberg
Robert G. Hager
Conrad Hall
Gerald Hirschfeld
Seymour Hoffberg
Adam Holender
John C. Hora
Eric Horvitch
Michel Hugo
Gil Hubbs
Judy Irola
Mark Irwin
Andrew Jackson
Peter James
Johnny E. Jensen
Robert C. Jessup
Torben Johnke
Frank Johnson
William K. Jurgensen
Janusz Z. Kaminski
Victor J. Kemper
Wayne Kennan
Gary Kibbe
Jan Kiesser
Jeffrey L. Kimball
Richard Kline
George Koblasa
Fred J. Koenekamp
Lajos Koltai
Laszlo Kovacs
Neil Krepela
Willy Kurant
George La Fountaine
Edward Lachman
Ken Lamkin
Stevan Larner
Andrew Laszlo
Matthew Leonetti
James F. Liles
Robert F. Liu
Emmanuel Lubezki
Constantine Makris
Karl Malkames
Isidore Mankofsky
Michael D. Margulies
Jacques R. Marquette
Enzo A. Martinelli
Vincent Martinelli
Don McAlpine
John McPherson
Terry K. Meade
Rexford Metz
David Millin
Richard Moore
Robert C. Moreno
Donald M. Morgan
Dennis Muren
Brianne Murphy
Fred Murphy
Hiro Narita
Michael Negrin
Sol Negrin
Meredith M. Nicholson
Sven Nykvist
Michael D. O'Shea
Woody Omens
Miroslav Ondricek
Emil Oster
Kenneth D. Peach, Jr.
Edward J. Pei
James Pergola
Don Peterman
Alex Phillips
Clifford Poland
Gene Polito
Steven B. Poster
Robert Primes
David Quaid
Earl Rath
Richard Rawlings, Jr
Frank Raymond
Gayne Rescher
Robert Richardson
Owen Roizman
Charles Rosher, Jr.
Edward Rio Rotunno
Giuseppe Rotunno
Juan Ruiz-Anchia
Marvin Rush
Paul Ryan
Ted Saizis
Vincent Saizis
Mikael Salomon
Nancy Schreiber
Fred Schuler
John Schwartzman
John Seale
Dean Semler
Steven Shaw
Richard Shore
Sandi Sissel
Bradley B. Six
Leonard South
William Spencer
Dante Spinotti
Frank Stanley
Bob Steadman
Bob Stevens
Vittorio Storaro
Harry Stradling, Jr.
Tim Suhrstedt
Alfred Taylor
William Taylor
Don Thorin
John Toll
Mario Tosi
Luciano Tovoli
Jost Vacano
Theo Van de Sande
Kees Van Oostrum
Ron Vargas
William Wages
Roy H. Wagner
Ric Waite
John F. Warren
Michael Watkins
Jonathan West
Joseph Westheimer
Haskell Wexler
Charles Wheeler
Jack Whitman
Gordon Willis
Dariusz Wolski
Ralph Woolsey
Lothrop Worth
Steve Yaconelli
Richard Yuricich
Vilmos Zsigmond
Kenneth Zunder

SPECIAL MEMBER

Perry Fitzgerald Finnerman

ASSOCIATE MEMBERS

Don Adams
Joerg Agin
Alan Albert
Gene Allen
Richard Aschman
Volker Bahnemann
Emerson R. Barlow
Thomas M. Barron
Larry Barton
Howard Bell
John Bickford
Steven A. Blakely
Jack Bonura
Gary Borton
William Brodersen
Garrett Brown
Ronald D. Burdett
Vincent Carabello
Edward Carlin
Leonard Chapman
Claude Chevereau
Denny Clairmont
Peter Comandini
Robert B. Creamer
Daniel Curry
Carlos D. DeMattos
Gary Demos
Richard DiBona
Edmund M. Di Giulio
Don Donigi
Jonathan Erland
John Farrand
Bob Fisher
Milton Forman
Frederick Franzwa
Douglas Fries
Steve Garfinkel
Richard B. Glickman
William Hansard
Richard Hart
Roman I. Harte
William R. Herndon
Philip Hetos
Frieder Hocheim
Robert C. Hummel
George Hutchison
Donald W. Iwerks
Ron Jarvis
Mac Jibiki
Michael Johnson
Paul Kenworthy
Milton K[illegible]w
Larry H. [illegible]gen
Ron Koch
Ron Lambert
Tracy Langan
Howard T. LaZare
Lou Levinson
Grant Loucks
Steven E. Manios
John L. Mason
Joe Matza
Albert L. Mayer
Andy McIntyre
Stan Miller
Walter H. Mills
George Milton
Rami Mina
Tak Miyagishima
Dash Morrison
F. Jack Napor
Iain A. Neil
Otto Nemenz
Ernst Nettmann
Mickel Niehenke
Marty Oppenheimer
H.A. Parker
Larry Parker
Michael Parker
Warren Parker
Doug Pentek
Henri-Dominique Petit
Ed Phillips
Carl Porcello
Phil Radin
Frank J. Ricotta, Sr.
Toni Robertson
Don Rogers
Andy Romanoff
Bill Russell
Kish Sadhvani
David Samuelson
Sydney Samuelson
James Sater
Peter K. Schnitzler
Garrett Smith
D. Brian Spruill
Marvin Stern
Richard J. Stumpf
Abbott Sydney
Joseph N. Tawil
Jack Teahan
Ira Tiffen
Nat Tiffen
Arthur Tostado
George Turner
Richard Vetter
Joe Violante
Jerry Virnig
Jan Yarbrough
Irwin M. Young
Nazir Zaidi

HONORARY MEMBERS

Col. Edwin E. Aldrin Jr.
Neil A. Armstrong
Col. Michael Collins
David MacDonald
Gregory Peck
Barbara Prevedel
Dr. Roderick T. Ryan
Bud Stone
Richard F. Walsh

From the Clubhouse

Lines of Sight

An ASC dinner meeting on Monday, March 30, entitled "Through A Glass Darkly," allowed members and their guests the opportunity to peruse an array of novel optical equipment: Denny Clairmont presented the new line of Cooke prime lenses, screening projected 35mm test footage; cinematographer Harry Mathias detailed the features of Schneider's B+W line of high-quality filters; Ira Tiffen exhibited his company's updated diffusion, day-for-night filters and a new cinematographer's preview kit, and also spoke about a system for the potential classification of diffusion, contrast reduction and halation filters; and Marty Ollstein related the latest developments in Tiffen's Crystal Image Digital Filters and presented clips from a combination filter test/Western thriller — photographed by ASC members Vilmos Zsigmond and Laszlo Kovacs — which contained digital, telecine and conventional filter effects.

◆◆◆

SOC Honors Greatness

On April 26, the Society of Operating Cameraman (SOC) held their 10th Annual Lifetime Achievement Awards Gala at the Ritz-Carlton Hotel in Marina Del Rey.

Hosted by jovial KTLA *Morning News* reporter Mark Kriski, the evening opened as SOC President Stan McClain made a generous $20,000 donation to the Childrens Hospital Los Angeles Eye Care Clinic, on behalf of his organization.

Director of photography Jack Green, ASC was then honored with the President's Award, presented by longtime collaborator and friend Clint Eastwood. These two men have worked together on some 26 feature films, including *Unforgiven*, *Heartbreak Ridge*, *Bird*, *Pink Cadillac*, *The Bridges of Madison County*, *Absolute Power*, and *Midnight in the Garden of Good and Evil*. A founding member of the SOC, Green offers, "It means a lot to me to receive this award, because I know firsthand that no one better understands, appreciates or is more supportive of the creative role played by cinematographers than camera operators."

Other lifetime achievement awardees included ASC associate member Garrett Brown, who was recognized for his technical and artistic contributions to the craft of operating; veteran video camera operator John Lee; film camera operator Vaughn Wilkins; still photographer Elliot Marks; camera assistant Cal Roberts; the late Jim Buck, who made his mark as a mobile platform camera operator; and director Ron Howard.

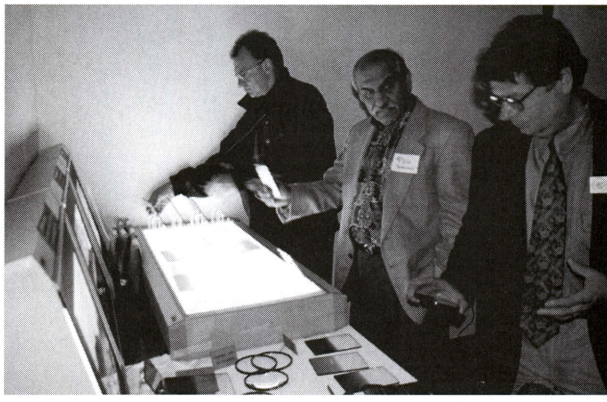
Honored for their technical contributions were Fuji Photo Optical Co. Ltd., Sachtler, and The Shotmaker Company.

The evening's other presenters included ASC President Woody Omens; John A. Alonzo, ASC; Haskel Wexler, ASC; International Photographers Guild President George Spiro Dibie, ASC; SOC charter member and vice president William Hines; KTLA reporter Stan Chambers; actor David Hyde Pierce; actress Christine Baranski; actress Kathleen Quinlan; and actress René Russo.

◆◆◆

Dunn Inducted Into VES

The lifetime achievements of ASC member Linwood Dunn were recently commemorated by the newly formed Visual Effects Society (VES). Out of respect of Dunn's pioneering work, the VES dubbed him an "Honorary Founding Member" of the organization. Over the course of illustrious career, Dunn has created visual effects for such classic films as *King Kong*, *Citizen Kane*, *Cat People*, *Mighty Joe Young*, *The Thing*, *West Side Story*, *It's A Mad, Mad, Mad, Mad World*, *Hawaii* and *Devil's Rain*, along with Gene Roddenberry's original *Star Trek* television series. Dunn was honored at a ceremony at the Atom Smashers Neon Warehouse in Marina Del Rey, along with fellow effects veterans Ray Harryhausen, Albert Whitlock and Peter Ellenshaw. ■



Photos by Marvin Lopez.

At the ASC meeting. Above, left to right: Theo Van de Sande, ASC; associate member Kish Sadhvani, and Jack Green, ASC inspect some of Schneider's new filters. Left: associate member Denny Clairmont demonstrates the new Cooke optics to Kish Sadhvani. Below, left: Stephen Burum, ASC and associate member Ira Tiffen discuss the Crystal Image system.

WRAP SHOT

Released in 1969, *On Her Majesty's Secret Service*, the sixth entry in the James Bond series, still ranks as one of the most action-packed 007 adventures to date, with Australian actor George Lazenby making his lone appearance as the British superspy. (Fanatics can find complete coverage in *AC* March 1970.)

In this shot, the athletic Lazenby makes his way hand-over-hand along the suspension cable of a gondola car. Camera operator Alec Mills hangs on a "flying ballet"-style rig for an excellent close-up with a handheld Arriflex, the battery pack suspended behind him. The action is set 10,000' above sea level at the top of Mount Schilthorn in the Swiss Alps, the lair of Bond's felinophilic SPECTRE nemesis, Ernst Stavro Blofeld (played by Telly Savalas). During the scene in question, Bond must successfully traverse the cable or be crushed by a set of massive gears.

The film's plot is typically fantastic, but features several human moments for 007. On vacation, he prevents a young woman, Tracy Draco (Diana Rigg), from committing suicide. Her crime boss father is impressed and wants Bond to protect Tracy by marrying her. In exchange, he offers to lead 007 to Blofeld. Bond initially agrees to the deal purely to fulfill his objective of killing Blofeld, but later he grows to love the girl — who later dies at Blofeld's hand.

Directed by Peter R. Hunt, who edited the first four Bond installments and oversaw the second-unit work on *You Only Live Twice*, the film was shot in Panavision anamorphic by lighting cameraman Michael Reed, BSC. While the cinematographer's previous feature work included an eclectic collection of Hammer Studios productions (including *Prehistoric Women, Rasputin — The Mad Monk, Dracula: Prince of Darkness* and *The Gorgon*), his experiences as director of photography on *The Saint* TV series (starring future Bond star Roger Moore) must have prepped him to render 007's supercool spy world. During his time on *The Saint* he also developed a working relationship with operator Mills, who would later serve behind the camera on several other Bond films, including *Octopussy, For Your Eyes Only, Moonraker* and *The Spy Who Loved Me*.

The production of *On Her Majesty's Secret Service* was an especially difficult one. Locations included Switzerland, Portugal and London, while stage work was done at 007's de facto HQ, Pinewood Studios. Unfortunately, the picture was a box-office disappointment and Lazenby walked away from the Bond role of his own accord — forever prompting speculation by die-hard fans about the various ways in which the part could be played.

Reed, Mills and Hunt would collaborate again on the film *Shout at the Devil*.

— David E. Williams

> zoom spot > incident > fc/lux > all weather

NEW SEKONIC L-508C

cine

A new version of the revolutionary Sekonic L-508 has been designed for the professional cinematographer. The L-508C Cine features 1°-4° zoom spot, incident, foot candle, lux and foot lambert readouts. Cine speeds from 2 fps to 360 fps. Shutter angle settings range from 5° to 270°. All combined into one rugged, compact, all-weather instrument. Ideal for motion picture needs, it offers elegant simplicity, with complete functionality, and consistent exposure accuracy – replacing the traditional requirement for different meters and various costly accessories. Its brilliant, large, cool-blue luminescent panel activates automatically in low light, making it easy to see under all conditions. The L-508C is the one light meter that fits every exposure challenge for the professional cinematographer, photographer, and the dedicated enthusiast.

THE ONLY LIGHT METER YOU'LL EVER NEED

3 Year Extended Warranty
Upon receipt of completed registration card & copy of bill-of-sale

See it at your dealer or call or write for brochure.

SEKONIC PROFESSIONAL DIVISION
MAMIYA AMERICA CORPORATION
8 Westchester Plaza, Elmsford, NY 10523 • 914-347-3300
For fast information FAX your request to 800-321-2205
E-mail: info@sekonic.com • Web site: www.sekonic.com

<See us in L.A. at Show Biz booth #101>

SEKONIC®
because light is the challenge℠

GamChroics©

★ the clear choice in dichroic filters!

★ Wide Range of Super Brilliant Colors!
★ Durable & Low Maintenance!
★ Heat Resistant Color Filters!
★ 1/8 Inch Thick (3.3mm) Glass!
★ Long Lasting Optical Coatings!
★ Your Choice of Custom & Standard Sizes!

For more information, call toll free:
★ 888-GAMCOLOR (US and Canada)

from the manufacturers of GamColor©

The Great American Market
826 North Cole Avenue
Hollywood CA 90038
Phone: 213/461-0200
Fax: 213/461-4308